

# INDIA IN CLASSICAL GREEK WRITINGS

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ELLIS BRIDGE

AHMEDABAD-6

TO  
THE MEMORY OF  
MY MOTHER

Who died when the book was in progress

## PREFACE

'India in Classical Greek Writings' is neither an extract of McCrindle's works as was done by me in my first book 'India as described by early Greek writers', nor is it a mere reprint of those works in full, as has been recently done. It is only an attempt to present a picture of ancient India—her geography and culture, as given by those historians who based their accounts on hearsay evidence, or who actually visited India. These accounts translated into English by McCrindle in several volumes, and published more than sixty years ago contain a lot of material which is incredible, and the accounts have, therefore, to be thoroughly scrutinised. These are sieved, collected, and sorted out under different headings.

This work presents a brief account of the writers on India before and after the Christian era; India—its shape, size and boundaries, mountains and rivers; social divisions and religious life under different headings; economic enterprises, natural and mineral resources; flora and fauna. Political information connected with the Achaemenian and Greek invasions of north-west India figures separately. There is also a chapter on Ceylon which had closer cultural and commercial ties with India. The language throughout the text is that of McCrindle, and sometimes in the text and the footnotes the first person is used. The notes at the end are my own, given with a view to corroborating, or elaborating on any point noticed in the text. The reader would be able to find at one place all that the Greek writers have said on a particular topic. I do not take the credit for comprehensiveness, as only two works of McCrindle: *Ancient India as described in classical literature*, and *Ancient India as described by Megasthenes and Arrian* are utilised here. It is hoped that the book would prove helpful to the students of ancient Indian History, and to those who want to know something about India as known to the ancient Greeks.

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## CHAPTER I

### Introduction

#### Writers on India Before the Christian Era

The early works again admit of a subdivision according as they appeared *before* or *after* the Macedonian Invasion (326 B. C.), which was the means of opening up India and its wonders to the knowledge of mankind, which antecedently to that event was as meagre as it was vague and nebulous. There were four works in which that knowledge, such as it was, was found embodied :-

1. The narrative of Skylax of Karyanda, in which he described his voyage of discovery made down the Indus from Kaspatyros to the sea—a voyage undertaken by order of Darius Hystaspis, who had in view to annex the lower valley of the Indus to his dominions.

2. The *Geography* (*Περιήγησις*) of Hekataeus of Miletus, in which are mentioned some Indian names: Indoi, Indus, Kallatiai, Argante, Gandarii, Kaspapyros, and Opiai, a people on the Indus.

3. The *History* of Herodotus.

4. The treatise on India, called the *Indika*, written by Ktesias the Knidian (about 400 B. C.), a work full of wonderful stories about India, with which the author had been entertained while resident for seventeen years in Persia as physician to the royal family.

The work of Ktesias had been some seventy years before the world, when Alexander's Asiatic expedition showed to what extent that author's accounts of India squared or otherwise with the facts as observed. The great conqueror's expedition was not entirely military; it was also partly scientific, and made vast additions to the sum of human knowledge. Alexander himself had

been a disciple of the great master of knowledge, and among the officers who accompanied him into India, not a few were distinguished for their literary and scientific culture. Some of these employed their pens in recording his warlike achievements and in describing the countries into which he had carried his arms. Among these the more eminent were: Ptolemy, the son of Lagus, who became King of Egypt; Aristobulus of Potidaea; Nearchus, the admiral of Alexander's fleet; Onesikritus, the pilot of the fleet, Eumenes of Kardia, Alexander's secretary; Chares of Mitylene; Kallisthenes, Aristotle's kinsman; Kleitarchus, son of Deinon of Rhodes; Polykleitus of Larissa; Anaximenes of Lampsakus; Diogenetus and Baeton, the measurer's of Alexander's marches; Kyrsilus of Pharsalus, and a few others. These writers were succeeded by three others, ambassadors sent successively by Greek sovereigns to the Indian court at Palibothra (Patna), namely, Megasthenes and Deimachus sent from the Syrian court, and Dionysius sent from the Egyptian. These all had the advantage which only one or two writers of the later period enjoyed, that of describing India from what they had seen with their own eyes. To them belongs the merit of having been the first who communicated to the world conceptions of India approximating to the truth on points of such principal importance as its position relative to other countries, its boundaries, its general configuration, its total dimensions both in length and breadth, its physical features and productions, the character of its inhabitants and the nature of their social and political institutions. It must be noted, however, that the personal acquaintance of Alexander and his companions with India was limited to the North-to the regions traversed by the Kophen (Kabul river) and the Indus, and the tributaries of these great rivers. Megasthenes,

however, saw more of the country than the writers who preceded him, for while their knowledge of it terminated at the Hyphasis ( Beias river ), he crossed that river near its junction with the Hesidrus ( Satlej river ), and pursuing his journey along the Royal Road, which ran from the Indus to the Jumna and the Ganges, arrived at Palibothra, the capital of Sandracottus ( Chandra Gupta ), the founder of the celebrated Mauryan Dynasty. This city, the ruins of which now lie buried to a depth of twelve or fifteen feet below the site of its modern representative, Patna, lay about two degrees to the north of the summer tropic, on the southern bank of the Ganges, at the point where uptill 1379 A. D. it received the waters of the Erannoboas, now the Son river. Here Megasthenes resided for several years, in the course of which he was admitted, as we are told, to several interviews also with his Queen, who was the daughter of his friend and sovereign, Seleukus Nikator, the King of Syria. Here also with assiduous observation and inquiry he collected the materials from which he composed his famous work on India, called the *Indika*, the merits of which were so conspicuous that it became of paramount authority, and the main source whence subsequent writers derived their accounts of India. Strabo, indeed, accused him of mendacity, but in spite of this censure he frequently cites him. Megasthenes moreover, is now recognised as a writer of scrupulous veracity, for it is found that the picture which he presents of Indian life, customs, and institutions is, so far as can now be judged, singularly correct. The ground on which Strabo has mainly based his attack is, that Megasthenes has described as existing in India some races of men which were not only of monstrous but even of impossible deformity. Now the names of these races are either transliterations or translations of names all of which

occur in Sanskrit literature, a fact which shows that Megasthenes did not invent the stories about those races, but must have heard them from natives-descendants of the Aryan conquerors of India, who were in the habit of holding up to contempt and odium the indigenous tribes who had resisted their arms.

Deimachus also wrote a work on India, but nothing more is known of it than that it consisted of two books and grossly exaggerated the dimensions of the country. Still less is known of Dionysius, who, as Pliny tells us, was sent by Ptolemy Philadelphus to the Indian King, and like Megasthenes made known the forces of the Indian nations.

Somewhat later than the work of Megasthenes on India, another was written by Patrokles, not however restricted to that country, but embracing also the provinces between the Indus and the Kaspian Sea, which he governed both for Seleukus Nikator and Antiochus I. Patrokles is often cited by Strabo and commended for his veracity.

The information contained in the works of Patrokles was held in high esteem and much used by Eratosthenes, the President (from 240-195 B. C.) of the Alexandrian Library, and the first who raised Geography to the rank of a science, by collecting its facts hitherto scattered and disjointed, and arranging them in a system framed on scientific principles. The conclusions, however, at which Eratosthenes arrived with regard to the position and configuration of India were far from correct. He conceived, for instance, that the projecting point of the peninsula faced south-east instead of south, and even advanced towards the east farther than the mouth of the Ganges, herein departing from the guidance of Patrokles. Like Herodotus, moreover, he conceived that India lay at the world's end on the verge of the Eastern Ocean.

The *History* of Polybius, who wrote about 144 B.C., contained, there is reason to believe, valuable information about India relating to the times of the Seleucid sovereigns. But most of the books of that work have been lost, and we have only the one short notice which is given in this volume.

The next writer after Polybius who notices India and belongs to the period under consideration was Artemidorus of Ephesus, who flourished about 100 B.C., and was the author of an excellent work on Geography, extracts from which were preserved by Marcianus of Herakleia (about 400 A.D.). With regard to India he seems to have followed inferior authorities, and his account of it is pronounced by Strabo to be inaccurate. He avoided, however, the too common error of making the Ganges flow from west to east. Some of his estimates of distances along the coasts of India have been preserved.

From this review of the early literature about India it will be seen that after the time of Megasthenes very scanty additions were made to the knowledge of India during the period under notice. We may attribute this in great measure to the rise and spread of the Parthian power, which interposed as a barrier to prevent communication between Syria and her provinces in the East which had revolted from her authority in the reign of Antiochus II. How effective this barrier proved in preventing the knowledge of what was happening in the East from penetrating to the West, may be judged from the fact that we are indebted to the researches of modern scholars<sup>1</sup> for our knowledge of the existence of the Graeco-Baktrian sovereigns some of whom had extended their sway into

1. Such as Bayer, Grotfend, Masson, Bartholomaei, Prinsep, Wilson, von Sallet, Lassen, Thomas, etc.

Northern India as far, perhaps, as to the mouth of the Narbada. The conclusions of these scholars have been based on a few incidental notices in the classical writers, but mainly on the inscriptions on coins of the sovereigns found in great abundance in North Afghanistan and Baktria.

It is greatly to be regretted that, with the exception of Herodotus, not one of the works on India penned by any of the foregoing writers who knew the country personally has come down to us except in epitomes or citations from later authors.

### Writers About and After the Time of the Christian Era

These later writers on India differ from their predecessors in this respect, that, with only one or two doubtful exceptions, they all write without personal knowledge of the country. The author of the '*Periplus of the Erythraean Sea*' probably visited the seats of commerce on the western seaboard, and Kosmas Indikopleustes, the island of Ceylon and the Malabar coast, but so much as this cannot, so far as I am aware, be said safely of any other writers on India who belonged to this period. We are indebted, however, to these writers not only for having preserved much of what they had learned themselves from the earlier works, all lost since their time, but also for much valuable information which they had gathered from merchants engaged in the Indian trade, from travellers who had visited India, from ambassadors sent from India to the emperors either at Rome or at Constantinople, and from Indians themselves settled in Alexandria, if not also in other places.

The writers who have made most additions to the old stock of information are the unknown author of the *Periplus* referred to, Pliny, Ptolemy the Geographer, Porphyry, Stobeaus, and Kosmas Indikopleustes. The

author of the *Periplus* and Pliny have thrown much light on the geography of India, and on the nature of its commerce with Egypt and the West. Ptolemy, again, made important additions to the knowledge of the geography of Ceylon, the interior of India, and India beyond the Ganges. His map of India, however, has been distorted out of recognition by a portentous error, which makes the west coast, instead of running direct south to Cape Comorin, turn round, a little below the latitude of Bombay, and run eastward, thus altogether effacing the peninsula. Porphyry and Stobaeus have preserved from Bardesanes, who flourished in the later half of the second century A. D., interesting particulars regarding the Brahman and Buddhist ascetics.

The story of Alexander's conquest of India, as related by his companions and other contemporaries, has been preserved by six authors in more or less detail: Diodorus Siculus, Arrian, Plutarch, Q. Curtius, Justinus, and the unknown author of the *Itinerarium Alexandri Magni*, a work written for the guidance of the Emperor Constantius II, in his war against Persia. Polyaenus in his *Stratagems of War*, and Frontinus, who was at one time the Roman governor of Britain, in his work on the same subject, notice stratagems employed by Alexander in his Indian campaigns.

The period we are considering produced the two greatest works on Geography that antiquity can boast; the *Geography* of Strabo, completed about 19 A. D., and that of Claudius Ptolemy, which appeared about the middle of the second century A. D. Strabo's colossal work embraced Geography in all its branches - mathematical, physical, political, commercial and historical. Ptolemy's *Guide to Geography*, which continued to be the paramount authority on the science till the discoveries

of the great navigators of the later years of the fifteenth century showed its errors, differed from Strabo's production as does a skeleton from the living body. It contained very few descriptive notices, for Ptolemy's object in composing it was to correct and reform the map of the world, to expound the geometrical principles on which Geography should be based, and to determine the position of places on the surface of the earth by their latitudes and longitudes. Thus the bulk of his work consists of tables of names of places, followed by the figures for their latitudes and longitudes. In the Indian tables we find the names of many places which occur nowhere else. These he probably found in itineraries now lost, or in Sanskrit texts brought to Alexandria from India. Four other geographical works may be mentioned which make reference to India. The *Compendium of Geography* by Pomponius Mela, another *Compendium* by Solinus, the *Periegesis* of Dionysius, and the *Periplus of the Outer Sea* by Marcianus of Herakleia. Geography was a science about which the Romans cared but little, and in their literature only two regular treatises on the subject have come down to us, the *Compendiums* of Mela and Solinus. Mela wrote about 42 A. D. India has a place in his work, but Mela's knowledge of it was very vague, and his descriptive notices are borrowed from the ordinary Greek authorities. He regarded the promontory of Kolis (Cape Kory) as forming the eastern extremity of Asia in the South, and otherwise shows that he took no advantage of the increased knowledge in his day of the shores of India resulting from the extension of Roman commerce in the East. Solinus, who wrote about 238 A. D., derived nearly all his materials from Pliny's *Natural History*, the language of which he sometimes copies word for word without acknowledgement.

He was partly also a copyist from Mela. His work was popular, and became the medium through which Pliny was best known in the middle ages. The eighty-five hexameter verses in which Dionysius Periegetes has described India and its conquest by Bacchus will be found translated in this volume. This poem was translated into Latin hexameters both by Avienus and Priscian the Grammarian. Marcianus, who wrote in Greek (about A. D. 400), follows Ptolemy, but his *Periplus* gives no information about India that is not to be found in the great Alexandrian geographer. With regard to the Romance History of Alexander the Great (*Pseudo-Kallisthenes*), I have briefly indicated the nature of its contents, and translated the account given by Palladius in his *Lausiac Histories* of the Indian experiences of the Theban scholar. Within the present decade Dr. Budge of the British Museum has published translations both of the Syriac and the Ethiopic versions of the Romance. It has been translated into numerous other languages, and no book in the world, he says, except the Bible has been so widely read. I have sketched briefly the account given by Nonnus in his vast epic of the conquest of India by Bacchus.

India is very frequently mentioned incidentally in the classics. Many of the notices have been cited in the five previous volumes. Those given here throw some light on Roman commerce with India, and on the embassies sent from thence to the Imperial Courts of Rome and Constantinople. From the brevity with which these embassies are noticed, we can gather little more than that the greatness of the Roman power had made a deep impression on the Indian mind, especially along the western seaboard, where, until the third century of our era, the commerce with Alexandria was still maintained, though

seems well nigh to embrace the whole of the northern tropic zone of the earth, and in fact, at the extreme point of India the gnomon of the sundial may frequently be observed to cast no shadow, while the constellation of the Bear is by night visible, and in the remotest parts even Arcturus disappears from view. Consistently with this, it is also stated that shadows there fall to the southward. (Diod. II. 35-42).

### Position

According to Eratosthenes, and Megasthenes who lived with Siburtios the satrap of Arachosia, and who, as he himself tells us, often visited Sandrakottos<sup>1</sup> the king of the Indians, India forms the largest of the four parts into which southern Asia is divided, while the smallest part is the region which is included between the Euphrates and our own sea. The two remaining parts, which are separated from the others by the Euphrates and the Indus, and lie between these rivers, are scarcely of sufficient size to be compared with India, even should they be taken both together. The same writers say that India is bounded on its eastern side, right onwards to the south, by the great ocean; that its northern frontier is formed by the Kaukasos range as far as the junction of that range with Tauros; and that the boundary towards the west and the north-west, as far as the great ocean, is formed by the river Indus. A considerable portion of India consists of a level plain, and this, as the conjecture, has been formed from the alluvial deposits of the river, — inferring this from the fact that in other countries

1. The name of Chandragupta is written by the Greeks Sandrokottos, Sandrakottas, Sandrakottos, Androkottos and (best) Sandrokuptos. cf. Schlegel, Bibl. Ind. I. 245 Schwanbeck, p. 12 n. 6.

plains which are far away from the sea are generally formations of their respective rivers, so that in old times a country was even called by the name of its river. (Book I. Frag II. Arr. Exped. Alex V. 6.2-11).

### Size

India<sup>1</sup> is bounded on the north by the extremities of Taurous,<sup>2</sup> and from Ariana to the Eastern sea by the

1. Conf. Epit. 1, 2. Pliny (*Hist. Nat.* VI. 21. 2) states that India extends from north to south 28,150 thousand paces. This number, though it is not exactly equal to 22,300 stadia, but to 22,800 nevertheless approaches the number given by Megasthenes nearer than any other. From the numbers which both Arrian (*Ind.* III. 8) and Strabo (pp. 68-69, 690) give, Diodorus differs remarkably for he says the breadth extends to 28,000 and the length to 32,000 stadia. It would be rash to deny that Megasthenes may also have indicated the larger numbers of Diodorus, for Arrian (*Ind.* III. 7-8) adds to the number the words—"where shortest" and "where narrowest", and Strabo (p. 689) has added to the expression of the breadth the words "at the shortest", and, referring to Megasthenes and Deimachos, says, distinctly, "who state that in some places the distance from the southern sea is 20,000 stadia, and in others 30,000 (pp. 68, 69). There can be no doubt, however, that Megasthenes regarded the smaller, and Deimachos the larger number as correct; for the larger seemed to Arrian unworthy of mention, and Strabo (p. 690) says decidedly,—"Megasthenes and Deimachos incline to be more moderate in their estimate, for according to them the distance from the Southern sea to Caucasus is over 20,000 stadia: Deimachos, however, allows that the distance in some places exceeds 30,000 stadia"; by which he quite excludes Megasthenes from this opinion. And at p. 72, where he mentions the 30,000 stadia of Deimachos, he does not say a word of Megasthenes. But it must be certain that 16000 stadia is the only measure Megasthenes gave of the breadth of India. For not only Strabo (p. 689) and Arrian (*Ind.* III. 7) have not quoted a larger

mountains which are variously called by the natives of these regions Parapamisos, and Hemodos, and Himaos<sup>3</sup> and other names,<sup>4</sup> but by the Macedonians Kaukasos.<sup>5</sup>

number from Megasthenes, but Hipparchos also (Strabo. p. 69)—where he shows that Patrokles is unworthy of confidence, because he has given smaller dimensions for India than Megasthenes—only mentions the measure of 16,000 stadia; where, for what Hipparchos wanted the greatest number was the most suitable for his proof.—I think the numbers were augmented because Megasthenes regarded as Indian, Kabul and that part of Ariana which Chandragupta had taken from Seleukos; and on the north the frontier nations Uttarakuras, which he mentions elsewhere. What Megasthenes said about the breadth of India remained fixed throughout the whole geography of the Greeks, so that not even Ptolemy, who says India extends 16,800 stadia, differs much from it. But his measure of length has either been rejected by all, for fear of opposing the ancient opinion that the torrid zone could not be inhabited, or (like Hipparchos) erroneously carried much too far to the north—Schwanbeck, pp. 29, 30 n. 24.

2. 'Eratosthenes and Strabo believed that the eastern parts of Asia terminated at the mouth of the Ganges, and that, consequently, this river discharged itself into the Eastern ocean at the place where terminated the long chain of Tauros.'
3. Schmieder suggests *Ipaos* in Arrian.
4. Compare what is said in Arrian's *Indika*, C. 2. 'The range (of Tauros) bears different names in the various countries which it traverses. In one place it is called Parapamisos, in another Emodos, in a third Imaos, and it has perhaps other names besides these. The Macedonians who served with Alexander called it Kaukasos'. The eastern part of the Indian Kaukasos is called the *Hindukush*, and the western *Paropamisos*, or, as Ptolemy and Pliny spell it, *Paropanisos*. Writers are not agreed as to the etymology of the name (full note as given by McCrindle follows elsewhere). According to Dr. Bellew the word is supposed to be derived from the Hindu *parvabāma*, 'flat-topped mountain'. *Emodos* generally designated that part of

## The Boundary

The boundary on the west is the river Indus,<sup>6</sup> but the southern and eastern sides, which are both much greater than the others, run out into the Atlantic Ocean.<sup>7</sup> The shape of the country is thus rhomboidal, since each of the greater sides exceeds its opposite side by 3000 stadia, which is the length of the promontory common to the south and the east-coast, which projects equally in these

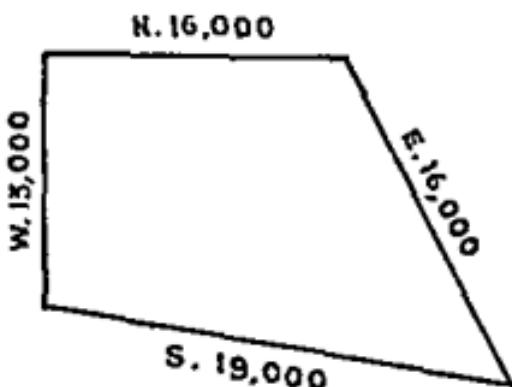
the Himalayan range which extended along Nepal and Bhutan and onward towards the east. Lassen derives the name from the Sanskrit *haimavata*, in Prakrit *haimota*, 'snowy'. Other forms are *Emodo*, *Emodon*, and *Hemodes*. *Imaos* designated the *Bolor* chain which has been for ages the boundary between China and Turkestan. Pliny (VI. 21) calls it a *promontorium* of the *Hemodus* Mountains, and says correctly that it means 'snowy' in the speech of the inhabitants.

5. i. e. the Himalayas.
6. That India was limited to the eastern side of the Indus was the view generally held in antiquity, and that which was favoured by the Hindus themselves. The name was, however, sometimes extended to comprise the regions lying between that river and the great mountain ranges of the Hindu-Kush and Paropanisos. (see Pliny VI. 23). This extension of the name seems to be justified when we consider that in many cases the names of the tribes, mountains and rivers of northern Afghanistan, as we find them given by the historians of Alexander and in Ptolemy's '*Geography*', were of Sanskrit origin, and that this region was at one time more or less fully occupied by Aryan settlers who thence diffused themselves over the Panjab and other parts of India. This subject is discussed at length in Elphinstone's *History of India* pp. 331-36, and also by V. de saint.-Martin, '*Etude*' pp. 9-14.
7. The world was anciently regarded as an island surrounded by the Atlantic sea. At the time when Strabo wrote, the name of the *Atlantic* was applied to the whole body of the water by which the world was surrounded.

two directions. [The length of the western side, measured from the Kaukasian mountains to the southern sea along the course of the river Indus to its mouths, is said to be 13,000 stadia, so that the eastern side opposite, with the addition of the 3000 stadia of the promontory, will be some-where about 16,000 stadia. This is the breadth of India where it is both smallest and greatest.<sup>8</sup> The length

8. Falconer has here a strange rendering. If again we add to this distance the extent of the extremity which advances far towards the east, the greatest length of India will be 3000 stadia.

In stating the dimensions of India, Strabo, like Eratosthenes, adopted the computations of Patrokles in preference to those of Megasthenes. Patrokles was an officer in high command under Seleukos Nikator and also under his son and successor, Antiochos I, by whom he was entrusted with the government of all the provinces situated between the frontiers and the Kaspian sea. He availed himself of his position to advance the cause of geography, and Eratosthenes in reforming the map of the world found valuable material for his purpose in the information regarding India and Central Asia, which Patrokles had collected and reduced to writing. Strabo's description, as here given, of the configuration of India may be represented by a rhomboid of this construction,



where the north side, represented by a line drawn from the supposed sources of the Indus to the mouth of the Ganges;

from west to east as far Palibothra<sup>9</sup> can be stated with great certainty, for the royal road which leads to that

the west side by a line drawn from the same point to the mouth of the Indus: the south side by a line drawn to Cape Comorin, and the east side by a line drawn from that Cape to the mouth of the Ganges, beyond which Strabo's knowledge of the east did not extend. As the Olympic stadium was equal to 606 $\frac{2}{3}$  English feet, the length of the western side (13000 stadia) measured along the course of the Indus from its sources downward to the sea, would be 1494 British miles. The actual length of the Indus is, however, 1810 miles. The ancients did not know the real position of its sources nor in fact was this point ascertained till comparatively recent times. Strabo appears to have estimated the distance of the sources from Alexander's Bridge at 3000 stadia (= 345 miles), since all the accounts agreed in taking 10,000 stadia as the distance of the Bridge from the sea. This estimate, we may remark, is excessive, as the distance is only 940 miles instead of 1149, the Bridge to the sources was estimated by Patrokles at 2000 stadia only, or 228 miles.

- With regard to the stages on the Royal Road, Pliny (vi. 21), citing Diognetus and Baeton, the measurers of Alexander's distances, thus records their names and the intervening distances: 'From Peucolatis, a town of the Indians, to the river Indus and the town of Taxila 60 miles; to the famous Hydaspes 120 miles; to the Hyphasis, a no less notable river (xxix), 390, which was the limit of the marches of Alexander: the river, however, having been crossed, and altars dedicated on the opposite banks, the letters too of the king himself agree with these figures. The rest of the stages were traversed for Seleucus Nicator; to the Sydrus 169 miles; to the Jemanes river the same number of miles (some copies add 5 miles); thence to the Ganges 112 miles 500 (paces); to Rhodapha 568 miles (others give 325 miles for the distance); to the town of Callinipaxa 167 miles 500 pace (others give 265 miles); thence to the confluence of the Jemanes river and the Ganges 625 miles (most writers add 13 miles and 500

city has been measured by *Schoeni*,<sup>10</sup> and is in length 10,000 stadia. The extent of the parts beyond can be conjectured from the time taken to make voyages from the sea to Palibothra by the Ganges, and may be about 6000 stadia. The entire length, computed at the shortest, will be 16,000 stadia. This is the estimate of Eratosthenes, who says he derived it principally from the authoritative register of the stages on the Royal Road. Here in Megasthenes agrees with him (Patrokles, however, makes the length less by 1000 stadia) Conf. Arr. Ind. iii. 1-5 (Meg. Frag. IV; Strabo XV, i, 11-p. 689)

paces); to the town of Palibothra 425 miles; to the mouth of the Ganges 637 miles 500 paces (For identification of the places here mentioned and on explanation of the figures of distance, see McCrindles' note on 'List of Indian Races'. Frag. LVI. p. 130-2).

10. According to Herodotus the *Schoinos* was equal to two Persian parasangs or sixty stadia, but by Eratosthenes it was taken as equal to forty stadia, while by other it was reduced to thirty two only (Pliny xii. 30). The *Stathmos* or distance from station to station was not a strict measure of distance but was longer or shorter according to the time occupied in traversing it. The *Schoinos*, however, which with Eratosthenes is a measure of 40 stadia coincides precisely with the Indian *yojana* of four *Krośas*. According to Schwanbeck, usually double this length is assigned to the *yojana*, but also that it is shorter than the Hindus reckon it (As. Res. Vol. V p. 105), and also by the Chinese pilgrims (*Foe-Koue-ki* 87-88), and by Megasthenes himself, in Strabo (p. 708, Fragm. xxxiv. 3), from which it seems certain that ten stadia are equal to some Indian measure which cannot be a smaller one than the *Krośa* p. 27, n. 23.

## Dimensions :

(From this, one can readily see how the accounts of the other writers vary from one another. Thus Ktesias<sup>1</sup> says that India is not of less size than the rest of Asia; Onesikritos regards it as the third part of the habitable world; and Nearchos says it takes one four months to traverse the plain only). Megasthenes and Deimachos incline to be more moderate in their estimate, for according to them the distance from the southern sea to Kaukasos is over 20,000 stadia—(Deimachos, however, allows that the the distance in some places exceeds 30,000 stadia. Of these, notice has been taken in an earlier part of the work) (Meg. Frag. VI. Strabo XV. i. 12 pp. 689-690).

1. Ktesias, a native of Knidos in Karia, was by profession a physician, and in this capacity lived for a number of years in Persia at the court of Artaxeres Mnemon. He turned to good account the opportunities which this position gave him of making himself acquainted with the history of the country for he not only obtained permission from the king to consult the state archives but had the further advantage of being able to collect information from conversing with the envoys who came to the court from the various provinces of the empire. The result of his enquiries, followed by a record of events which befell in this own time, he gave to the world in a greater work called the *Persika*, which exists only in an abridgement of its contents made by Photios and in citations made by other writers. He wrote also an *Indika*, a work for which he collected the materials during his residence in Persia, and which therefore describes India in accordance with the ideas which were current about it among the Persians, who seem to have taken it for their wonderland. It was written in a very attractive style, and hence, though discredited on account of the fictions with which it abounded, it enjoyed nevertheless a great popularity like the *Gulliver's Travels* (in England). This work, like the *Persika*, survives only in an abridgement made by Photios and in extracts found in other writers.

## Boundaries:

Now the countries which lie to the east of the Indus I take to be India proper, and the people who inhabit them to be Indians.<sup>1</sup> The northern boundaries of India so defined are formed by Mount Tauros, though the range does not retain that name in these parts. Tauros begins from the sea which washes the coasts of Pamphylia Lykia and Kilikia, and stretches away towards the Eastern sea, intersecting the whole continent of Asia. The range bears different names in the different countries which it traverses. In one place it is called Parapamisos in another Emodos,<sup>2</sup> and in a third Imaos, and it has perhaps

1. In limiting India to the eastern side of the Indus, Arrian expresses the view generally held in antiquity which would appear to be also that of the Hindus themselves, since they are forbidden by one of their old traditions to cross that river. Much, however, may be said for the theory which would extend India to the foot of the great mountain ranges of Hindukush and Parapamisos. There is, for instance, the fact that in the region lying between these mountains and the Indus many places either now bear, or have formerly borne, names which can with certainty be traced to Sanskrit sources. The subject is discussed at some length in Elphinstone's *History of India*, pp. 331-6, also by de. st. Martin - *Étude* pp. 9-14.
2. Parapamisos (other forms-Paropamisos, Paropamissus, Patopamissos). This denotes the great mountain range now called Hindukush, supposed to be a corrupted form of 'Indicus Caucasus' the name given to the range by the Makedonians, either to flatter Alexander, or because they regarded it as a continuation of Kaukasos. Arrian, however, and others held it to be a continuation of Tauros. The mountains belonging to the range which lie to the north of the Kabul river are called Nishadha (See Lassen, *Ind. Alt.* I. p. 22 note), a Sanskrit word which appears perhaps in the form Paropanisos, which is that given by Ptolemy. According to Pliny, the Skythians called Mount Caucasus Graucasis, a word which represents the Indian

other names besides. The Makedonians again, who served with Alexander called it Kaukasos,—this being another Kaukasos and distinct from the Sythian, so that the story went round that Alexander penetrated to the regions beyond Kaukasos. On the west the boundaries of India are marked by the river Indus all the way to the great ocean into which it pours its waters, which it does by two mouths. These mouths are not close to each other, like the five mouths of the Ister (Danube), but diverge like those of the Nile, by which the Egyptian delta is formed. The Indus in like manner makes an Indian

name of Paropamisos, Gravakshas, which Ritter translates '*splendens rupium montes*'. According to General Cunningham, the Mount Paresh or Aparasin of the Zendavesta corresponds with the Paropanisos of the Greeks. *Paro*, the the first part of the word, St. Martin says, represents undoubtedly the Paru or Paruta of the local dialects (in Zend, *Puroufs*, meaning *mountain*. } He acknowledges, however, that he cannot assign any reason why the syllable *pa* has been intercalated between the vocables *paru* and *nishada* to form the Paropanisadae of the Greek. The first greek writer who mentions the range is Aristotle, who calls it Parnassos; see his *Meteorol* I. 18. Hindukush generally designates now the eastern part of the the range and Paropamisos the western. According to Sir Alexander Burnes, the name Hindukush is unknown to the Afghans, but there is a particular peak and also a pass bearing that name between Afghanistan and Turkestan-Emodos (other forms - Emoda, Emodon, Hemodes). The name generally designated that part of the Himalayan range which extended along Nepal and Bhutan and onward towards the ocean. Lassen derives the word from the Sanskrit *haimatat* in Prakrit *haimota*, 'snowy'. If this be so, ('Hemodos' is the more correct form. Another derivation refers the word to '*Hemādri*' (*hema*, gold, and *adri*, mountain), the 'golden mountain' so called either because they were thought to contain gold mines, or because of the aspect they presented when their snowy peaks reflected the golden effulgence of sunset.

delta, which is not inferior in area to the Egyptian, and is called in the Indian tongue Pattala.<sup>3</sup>

On the south-west, again, and on the south, India is bounded by the great ocean just mentioned, which also forms its boundary on the east. The parts toward the south about Patlala and the river Indus were seen by Alexander and many of the Greeks, but in an eastern direction Alexander did not penetrate beyond the river Hyphasis, though a few authors have described the country as far as the river Ganges and the parts near its mouths add the city of Palimbothra, which is the greatest in India, and situated near the Ganges. (Arrian. Frag. II).

#### Length and Breadth :

I shall now state the dimensions of India, and in doing so let me follow Eratosthenes of Kyrene as the

3. Pattala—the name of the Delta was properly Pātalene, and Pātala was its capital. This was situated at the head of the Delta, where the western stream of the Indus bifurcated. That he has generally been regarded as its modern representative, but General Cunningham would 'almost certainly' identify it with Nirankol or Haiderabad of which Pātalpur and Pātasila ('flat rock') were old appellations. With regard to the name Pātala he suggests that it may have been derived from Pātala, the trumpet flower "*(Bignonia Suaevolens)*," in allusion to the trumpet shape of the province included between the eastern and western branches of the mouth of the Indus, as the two branches as they approach the sea curve outward like the mouth of a trumpet. Ritter, however, says "Patala is the designation bestowed by the Brāhmaṇas on all the provinces in the west towards sunset, in antithesis to Prasiaka (the eastern realm) in Ganges-land; for *Pātāla* is the mythological name in Sanskrit of the under world, and consequently of the land of the west." Arrian's estimate of the magnitude of the Delta is somewhat excessive. The length of its base, from the Piti to the Kori mouth, was less than 1000 staida, while that of the Egyptian Delta was 1300.

safest authority, for this Eratosthenes made its circuit a subject of special enquiry.<sup>1</sup> He states, then, that if a line be drawn from Mount Tauros, where the Indus has its springs, along the course of that river and as far as the great ocean and the mouths of the Indus, this side of India will measure 13,000 stadia.<sup>2</sup> But the country side, which diverges from the same point of Tauros and runs along the Eastern sea, he makes of a much different length for there is a head land which projects far out into the sea, and this head land is in length about 3,000 stadia. The eastern side of India would thus by his calculation measure 16,000 stadia, and this is what he assigns as the breadth of India. The length, again, from west to east as far as the city of Palimbothra he sets down, he says, as it had been measured by Schoeni, since there existed a royal high way, and he gives it as 10,000 stadia. But as for the parts beyond they were not measured with equal accuracy. Those, however, who write from more hearsay allege that the breadth of India, inclusive of the head land which projects into the sea, is about 10,000 stadia while length measured from coast is about 20,000 stadia. But Ktesias of Knidos says

1. The measurements given by Strabo are more accurate than those of Arrian. They are, however, not at all wide of the mark; General Cunningham, indeed, remarks that their close agreement with the actual size of the country is very remarkable, and shows, he adds, that the Indians, even at that early date in their history had a very accurate knowledge of the form and extent of their native land.
2. The Olympic stadium, which was in general use throughout Greece, contained 600 Greek feet = 625 Roman feet or  $606\frac{1}{2}$  English feet. The Roman mile contained eight stadia being about half a stadium less than an English mile. The *Schoinos* (mentioned below) was = 2 Persian parasangs = 60 stadia, but was generally taken at half that length.

that India equals in size all the rest of Asia, which is absurd; while Onesikritos as absurdly declares that it is the third part of the whole earth. Nearchos, again, says that it takes a journey of four months to traverse even the plain of India; while Megasthenes, who calls the breadth of India its extent from east to west, though others call this its length, says that where shortest the breadth is 16,000 stadia, and that its length—by which he means its extent from north to south—is, where narrowest, 22,300 stadia. (Arrian Frag III).

### Mountains, Rivers and Plains :

The whole of India is watered by rivers, some of which unite with the two greatest, the Indus and the Ganges, while others enter the sea through mouths of their own. They all have their sources in the Kaukasos. At first they flow southward, but while some continue their course in this direction—those especially which fall into the Indus—others are diverted like the Ganges towards east. This river which is the largest in India, descends from the mountainous country and turns eastward upon its reaching the plains. Then flowing past Palibothra, a very large city, it pursues its way to the sea in that quarter and discharges into it by a single mouth.<sup>1</sup> The Indus falls into the southern sea by two mouths,<sup>2</sup> encompassing the country called Patalene which resembles the Delta in Egypt. By the vapours which ascend from so many rivers, and by the Etesian winds, India, as Era-

1. Ptolemy who wrote more than a century later than Strabo assigns to the Ganges five mouths and gives the name of each. He was the first writer who gave any definite information regarding the shores of Bengal at and beyond the mouths of that river.

2. The number of mouths by which the Indus enters the sea has frequently varied. Ptolemy gives it seven.

tosthenes states, is watered by the summer rains, and the level country is inundated. During the rainy season flax and millet, as well as *seasumum*, rice and *bosmoron* are sown; and in the winter season, wheat, barley, pulse and other esculents with which we are unacquainted. Nearly the same animals are bred in India as in Ethiopia and in Egypt, and the Indian rivers produce all the animals found in rivers of these countries, except the hippopotamus,<sup>4</sup> although Onesikritos affirms that even these animals are found in them. (Strabo XV. i. 13).

### Rainfall:

Those who agree in maintaining the resemblance of India to Egypt and Ethiopia, admit also that the plains which are not inundated are unproductive from the want of water. Nearchos says that the case of the Indian rivers answers the old question to what the rise of the Nile was due, by showing that it was caused by the summer rains. He states that Alexander on seeing crocodiles in the Hydaspes, and Egyptian beans in the Akesines, imagined he had discovered the sources of the Nile, and was about to equip a fleet in hopes of reaching Egypt by that river, but he ascertained not long afterwards that the project was impracticable.<sup>1</sup>

3. Patalene, the Delta of the Indus, received its name from the city of Patāla, which was its capital and stood where the river in Alexander's time bifurcated, probably, as Major General Haig thinks, not far from a spot 35 miles from Haiderabad in the direction of S. E.
4. This animal is exclusively confined to Africa.
1. Artian in his *Anabasis* (vi. 1) writes to the same effect, and adds that Alexander, in a letter to his mother Olympias, had informed her that he had discovered the sources of the Nile, but that on discovering his mistake he had deleted what he had written on the subject. The Egyptian bean is the *nelumbium speciosum*, the sacred Egyptian or Pythagorean bean.

'For midway were mighty rivers and formidable streams and first the ocean,'<sup>2</sup> into which all the Indian rivers discharge themselves; then Ariane, the Persian Gulf and the Arabian, Arabia itself and the country of the Troglodytes. The above is what is said on the subject of the winds and the rains, the swelling of the rivers and the inundation of the plains. (Strabo XV. i. 25).

### Description of Rivers and their Usefulness:

We must speak of these rivers in detail, pointing out in what respects they are useful to geography, and what description we have received of them from historians for, since rivers, besides this, form the natural boundaries of countries and determine their figure, they prove of great service in great part of the present treatise. The Nile and the Indian rivers have an advantage over the others, because the country could not be inhabited without them. Through the rivers it is open to navigation and fit for tillage, and but for them would be inaccessible and without any population. We shall now describe the rivers worth notice which fall into the Indus and the countries which they traverse. With respect to the others our ignorance is greater than our knowledge. Alexander, who had the chief share in discovering this country, when those who had treacherously murdered Darius sought to effect the revolt of Baktriane, decided first of all that it was his most expedient course to pursue and destroy these traitors. He, therefore, approached India through the country of the Arianians, and then leaving India on the right crossed over the Paropamisos into the northern parts and into Baktriane.<sup>1</sup> Having reduced to his

2. A quotation from Horner, *Od.* ii. 157.

1. Alexander turned aside from the pursuit of Bessos, one of the principal conspirators against Darius, to quell a revolt of the

authority all the countries in that direction that had been subject to the Persians, and even others besides, he then aspired to the conquest of India, about which he had received many but obscure reports from a variety of sources. He, therefore, turned back and recrossed the same mountains but by other and shorter roads, having India on his left hand. He then turned again towards it and towards its western frontiers and the rivers Kophes and Choapes.<sup>2</sup> The latter river falls into the Kophes near Plemyrion,<sup>3</sup> after passing by another city, Gorys, in traversing Bandobene and Gandaritis.<sup>4</sup> He ascertained

Areians. Having reduced that people and founded a city in their country, which he called Alexandreia (now represented by Herat) he marched by way of Seistan and Kabulistan to the foot of the Hindukush Mountains, where he founded another Alexandreia distinguished as Alexandreia of the Paropamisadai. He then crossed over the great mountain barrier into Baktriana and was occupied for nearly three years in reducing that province and the neighboring provinces of Sogdiana.

2. The Kophes is the Kabul river, and the Choaspes is its great tributary, the Kunar or Kameh. The Kophes is called by Arrian the Kophen, and by Ptolemy the Koa. Its sanskrit name is the Kubhā. It is a river of old renown, being mentioned in one of the Vedic hymns.
3. Plemyrion must have been situated at or near where Jalalabad now stands.
4. Gandhara is a name of high antiquity, as it is mentioned in one of the Vedic hymns, and frequently in the *Mahabharata* and other Sanskrit works. The Gandharic territory lay on both sides of the Kabul river, immediately above its junction with the Indus. In very early times, however, it extended even to the country east of the Indus, where was situated one of its two capitals, Takshaśilā, a great and flourishing city — that which the Greeks called Taxila. The western capital was Peukelaotis, or as Ptolemy calls it, Proklais. It is singular that the name of Gandhāra does not occur in the works of

that the mountainous and northern country was the most habitable and fertile, while the south country was one where waterless and elsewhere liable to be inundated by the rivers and scorched to the last degree by burning heat, fit enough to be occupied by wild beasts and not by human beings. He resolved, therefore, to make himself master just of that part of India which had a good report, thinking at the same time that the rivers which had to be passed and which flowed transversely through the countries which he was going to attack would be crossed with greater facility near their sources. He at the same time learned of many of the rivers united to form a single stream and that this occurred more frequently the farther they advanced into the country so that it would be difficult to traverse it, especially without the help of boats. Fearing therefore he might be thus obstructed, he crossed the Kophes and subdued the mountainous country which lay to the east. (Strabo XV. i. 26)

### From Kophes to the Indus :

After the Kophes was the Indus, then the Hydaspes then the Akesines and the Hyarotis, and lastly the Hypanis.<sup>1</sup> He was prevented from proceeding farther partly out of deference to certain oracles and partly compelled by his army, which was not exhausted with its toils, and suffering most of all from its constant

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the writers who accompanied Alexander into India and recorded his deeds in that country.

1. The Hypanis is the river now called the Beias, the Vipāśā of Sanskrit. It is called the Hyphasis by Arrian and Diodorus, and the Hypasis by Pliny and Q. Curtius. It joins the Śatadru or Satlej, and its name is sometimes, contrary to Sanskrit usage, given to the combined stream.

exposure to rain.<sup>2</sup> Hence we came to know the eastern parts of India lying on this side the Hypanis, and whatever parts besides have been described by those who, after Alexander, proceeded beyond the Hypanis to the Ganges and Palibothra.<sup>3</sup> Next to the Kophes there comes the river Indus. The regions between these two streams are possessed by the Astakenoi,<sup>4</sup> the Masianoi, the Nysaioi, and the Aspasioi; then there is also the realm of Assakanos, in which is Massaga, the chief city of the country and the royal residence.<sup>5</sup> Next the

2. The rainy season prevails in India from June or July to the middle of October. The rains had set in before Alexander crossed the Hydaspes to encounter Poros.
3. Megasthenes and Deimachos, or Daimachos were both ambassadors at Pataliputra (Patna) sent thither by Seleukos Nikator, the king of Syria. A passage in Pliny (vi. 17) has led to the belief that Seleukos himself had carried his arms to the regions of the Ganges. 'Reliqua (itinera) Seleucos Nicatori peragrata sunt', but this does not mean that the journeys were made by Seleukos himself, but for him, by his ambassadors. Pliny mentions another Greek ambassador who had been sent to the court of Palibothra-Dionysios, the representative of Ptolemy Philadelphos, the king of Egypt.
4. Arrian mentions that at the time of Alexander's invasion a chief called Astes ruled the district of Peukelaotis, which lay near the Indus, and hence it appears not unlikely that the Astakenoi here mentioned may have been the people who occupied this district.
5. This celebrated city was very strongly fortified, and when besieged by Alexander made an obstinate resistance until the Indian mercenaries by whom it was defended, being disheartened by the death of the chief of the place, surrendered on terms, which Alexander afterwards shamefully violated. Its Sanskrit name must have been Maśaka, while the classic authors call it variously Massaga, Massaka, Mazaga and Masoga. Saint-Martin in his map of the basin of the Kophes has conjecturally placed it near the Souastos or river of Swat

Indus again there is another city, Peukolaitis<sup>6</sup> in the neighbourhood of which Alexander transported his army across that river by means of a bridge which had been constructed for the purpose. (Strabo. XV. i. 27)

**Between the Indus and the Hydaspes:**

Between the Indus and the Hydaspes is Taxila, a large city and governed by good laws.<sup>1</sup> The surround-

in 30° 40' N. Lat. Some traces of its name are still to be found in the regions which must have been subject to the authority of its sovereign. Thus Court states that at a distance of twenty four miles from Bajour a ruined site exists which is called Massangar (Massanagar), and it may be added that in the *Grammar* of Pāṇini, who was a native of Gāndhāra, the word Māśakāvati occurs as the name both of a river and a district. It is somewhat singular that Ptolemy makes no mention in his *Geography* of this famous capital.

6. Peukolaitis, or as Arrian calls it (iv. 22) Peukelaotis, was the western capital of Gāndhāra. The name is a transliteration of *Pukkalaoti*, the Pali form of the Sanskrit *Pushkarātāti* or *Pushkalātāti*, a compound which means 'abounding in lotuses'. Its name in Ptolemy and the '*Periplus of the Erythraean sea*' is *Proklaia*. It was situated on the river now called the Landai.
1. The ruins of this great capital, which was one of the most ancient cities in all India, lie at the distance of a three days' journey to the east of the Indus in the neighbourhood of a town called Kāla-ka-Serai. They are scattered over a wide space extending about three miles from north to south, and two miles from east to west. Immediately adjacent to them is the rock seated village of Shah Dheri and through their midst flows a stream called the Tabrā Nālā, which is identical, no doubt, with the river called in one of the MSS. of the romance history of Alexander, falsely ascribed to Kallisthenes, the *Tibero-boam*, and in others the *Boroam*, *Baroam*, *Tiberio-Potamós*, and *Tiber nabon* respectively. The *nabon* of the last form is an evident error for *nalon* which is the Greek transcription of *nālī*, the Indian name commonly

ing country is thickly peopled and extremely fertile, as the mountains here begin to subside into the plains. The inhabitants and their king, Taxiles, received Alexander with kindness, and in return came by more than they bestowed so that the Macedonians were jealous and said

applied to small affluents. The discovery of these ruins and their identification as those of Taxila is one of the great services which Sir A. Cunningham has rendered to the cause of Indian archaeology. The name of Taxila in Sanskrit is *Takshaśilā* and in the *Pali* form, as found in a copper plate inscription, *Takhasila*, which sufficiently accounts for the Greek form. As *śilā* means a rock, the name of the city has been taken by some authorities to mean 'the Rock of the Takkas', but it more probably means 'the Rock of Takshaka', the great Naga King. At the time of Alexander's invasion Taxila was ruled by Omphis (Sansk. *Āmbhi*), who is generally called by his dynastic title, Taxiles. He surrendered himself and his kingdom unreservedly to the great conqueror. About eighty years after his time Taxila was taken by Aśoka, who afterwards ascended the throne of Magadha and made Buddhism the state religion of his vast dominions. In the early part of the second century B. C. it became a province of the Graeco-Baktrian monarchy, but soon changed masters, for in 126 B. C. the Indo-Skythian Sus or Abars acquired it and held it till it was wrested from their grasp by the celebrated Kanishka. Towards the middle of the first century of our era it was visited, 'tis said, by Apollonios of Tyana and his companion Damis, who described it as the residence of a sovereign who ruled over what had formerly been the kingdom of Poros. Outside the walls they are said to have seen a beautiful temple of porphyry containing a shrine around which were hung pictures on copper tablets representing the feats of Alexander and Poros. The city was afterwards visited by the Chinese pilgrims, Fa-hian in 400, and Hwen Thsiang in 630 and afterwards in 643. After this Taxila disappears altogether from history, and we know neither how nor when its ruin was accomplished.

it appeared as if Alexander had found none worthy of his bounty until he had crossed the Indus.<sup>2</sup> Some say that this country was larger than Egypt. Above this country among the mountains lie the dominions of Abisaros.<sup>3</sup> (Strabo, XV. i. 28).

2. According to Curtius (viii. 12), Taxiles presented Alexander and all his friends with golden crowns, together with eighty talents of coined silver, while Alexander not only returned to Taxiles the presents he had given, but added a thousand talents with many banqueting vessels of gold and silver, a vast quantity of Persian drapery, and thirty chargers from his own stalls, caparisoned as when he rode them himself. The Macedonian who made the envious remark was Meleager. He made it at supper while heated with wine, and in Alexander's own presence. The king remembering what agonies of remorse he had suffered after killing Kleitos, mastered his anger, and contented himself with saying that envious persons were nothing but their own tormentors.
3. Abisaros or Abisares is called by Arrian the King of the Indian Mountaineers, and as he seems to have ranked as a potentate on a level with Taxiles and Poros, we may infer that Kashmir either in whole or in part was included in his dominions. His name is derived from that of his kingdom, *Abhisara*, a mountainous country situated to the east of the Indus, and now called Hazara, a name which retains some traces of the old designation. Abisares became alarmed for the safety of his kingdom when he learned that Alexander had taken such a strongly fortified city as Massaga and was advancing towards the Indus, and he therefore sent troops across that river to succour the inhabitants in their resistance to the invader. He was in alliance with Poros, and had he but arrived with a body of troops in time to support his friend while Alexander still lay encamped on the western banks of the Hydaspes, it is extremely probable that Alexander would have been effectually prevented from crossing that river. After the defeat of Poros he sent an embassy to the conqueror with presents and proffers of submission, and was

## Between the Hydaspes and the Akesines :

Between the Hydaspes and Akesines is the country of Poros—an extensive and fertile district containing somewhere about 300 cities. Here in the neighbourhood of the Emodoi mountains<sup>1</sup> is the forest where Alexander cut a great quantity of pine, fir, cedar<sup>2</sup>, and various other trees fit for shipbuilding. This timber he brought down the Hydaspes, and with it constructed a fleet on that river near the cities which he founded on its opposite bank, where he crossed it and conquered Poros. Of these cities he called one Boukephalia<sup>3</sup> after his horse, which was killed in the battle with Poros. The other city he called Nikaia from the victory which he had gained. (Strabo, XV. i. 29).

in consequence permitted to retain his kingdom. He did not long survive, and his son, with Alexander's permission, ascended the vacant throne.

1. The Emodoi mountains were the Western Himalaya. Other forms of the name are *Emoda*, *Emodon*, *Hemodes*. Lassen derives the word from the Sanskrit *haimavata*, in Prakrit, *haimota*, meaning 'snowy'.
2. Conf. Diodor. xvii. 89. The cedars are the deodars which abound in the Himalyan forests, where they sometimes attain a height of 150 feet and a girth of upwards of 30.
3. Diodoros and Plutarch agree in placing Boukephalia or Boukephala on the eastern bank of the Hydaspes, but their authority is of little weight against that of Strabo and Arrian, who both place it on the west bank. Strabo in saying that it was built where Alexander embarked to cross the river differs from Arrian, who states that it was built on the site of Alexander's great camp, thus indicating that its real position was that now occupied by Jalalpur. It rose to be a city of great importance, and seems to have flourished for centuries, for it is noticed by Pliny (vi. 20) as the chief of three cities which belonged to the Asini, as well as by the author of the *Periplus* (sec. 47) and by Ptolemy in his *Geography* (vii. 46). Nikaia is only mentioned as a city founded by Alexander. It is now represented by Mong.

## Kathoi and the country of Sopeithes:

Some writers say that Kathaia and the country of Sopeithes, one of the petty kings, are situated in the tract between the two rivers (the Hydaspes and the Akesines). Others again place them beyond both the Akesines and the Hyarotis, on the borders of the territory of the other Poros, the nephew of Poros who was taken prisoner by Alexander, and call the country subject to him Gandaris.<sup>1</sup> (Strabo, XV. i. 30)

1. All the authorities are at one in recording that Alexander, in advancing eastward, had crossed the Hydraotes or Ravi before he encountered the Kathaians and defeated them at their great stronghold Sangala. It thus appears that Kathaia must have been situated to the east of that river and may probably have been nearly if not altogether coextensive with what is now called the district of Amritsar. There is not the same agreement with regard to the position of the kingdom of Sopeithes, for while Diodoros and Curtius represent it as adjacent to Kathaia, Arrian relegates it to the regions of the Hydaspes, and places its capital on that river at some distance below where Alexander defeated Poros, probably in the neighbourhood of Ahmedabad. Arrian would be right, if the Salt hills, as Strabo states below, formed part of the kingdom of Sopeithes, since these hills extended from the Hydaspes to the Indus, but there is reason to think that both authors are here in error, for while Arrian places the Kathaians to the east of the Hydraotes, Strabo allows that they had the subjects of Sopeithes for their next neighbours, and ascribes to the former certain peculiar customs which other writers ascribe to the latter. The Kathaians were not ruled by kings like the tribes which lay rearer the Indus, but were autonomous, each of the communities into which they were divided being self-governed. In point of martial skill and prowess they were superior to all their neighbours. Their very name indeed indicates their warlike propensities and predominance, for it is doubtless a modified form of Kshatriya, the designation of the military caste. It has not yet been ascertained where their capital

## Between Hypanis and Hydaspes :

The route, as far as the Hydaspes, lay for most part towards the south, and thereafter, to the Hypanis,

Sangala stood. General Cunningham identified it with Sakala, a city of great note in ancient times, but this lay sixty miles to *westward* of the Hydraotes, and besides, Sangala is not, as he has supposed a transcription of *Sagala* but of *Samkala*, which designates a place mentioned in Panini's Grammar in connection with the name of Sopeithes. The following quotation from an editorial article in *The Times of India* (7/xi/96) shows that General Cunningham's theory is no longer tenable : 'General Cunningham, however, taking Sakala (the Sagala of Ptolemy's *Geography*) to be the name in Sanskrit of the place which the Greeks called Sangala, found a site for it at Sanglawala-Tiba, a small rocky hill with ruins upon it, and a large swamp at its base - all features of Arrian's Sangala - situated between the Ravi and the Chenab, at about a distance of sixty miles to the west of Lahore. As Mr. McCrindle points out, this cannot have been the site of the Greecian Sangala, because all the historians place that city between the Ravi and the Beas; and he also gives other reasons, mainly philological against General Cunningham's hypothesis. A settlement of this important site question has lately been considerably advanced by the researches undertaken by the Punjab Government at Sanglawala-Tiba, with the positive result of showing that no such large fortified city Sangala can have ever existed there. This result, which has presumably reached Mr. McCrindle too late for incorporation in his present edition (new edition of the *Invasion of India by Alexander the Great* leaves the exact site of Sangala still to be sought for most probably in the direction indicated generally, on the 'Map of Alexander's route in his Asiatic Expedition, by Mr. McCrindle.'

The proper form of the name of Sopeithes is Sophytes, as we learn from an ancient coin of which the legend is in Greek characters. It is a transcription of the Sanskrit Saubhūta, which, as M. Sylvain Levi has shown, must have been the

more towards the east.<sup>1</sup> All throughout, however, it was nearer to the country at the foot of the mountains than to the plains. Alexander, therefore, on returning from the Hypanis to the Hydaspes and the station for his ships, prepared a fleet and sailed down the Hydaspes. All the rivers we have mentioned of which Hypanis is the last, flow into one, the Indus which is said to receive in all fifteen considerable streams.<sup>2</sup> Filled with all these, it attains in some places a breadth of 150 stadia, as writers who exaggerate say, but 50 at the most, according to more moderate writers, while 7 stadia is the smallest estimate. It then by two mouths discharges its waters into the southern sea, and forms an island called Patalene. It is said that many nations and cities lie all around it. Alexander's intention was to withdraw from the parts situated to the east, first, because, he was thwarted in his design of crossing the Hypanis and next because he learned from experience that the report he had formerly received was false, which represented the plains

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name of the country which Sopeithes ruled. General Cunningham has identified Gandaris with the present district of Gundulbar or Gundurbar.

1. This statement with regard to the direction of Alexander's march after he left Taxila is important, for it enables us to determine that Alexander reached the Hydaspes at Jalalpur, and not at Jihlam some thirty miles higher up the river, as some authorities have maintained. The scene of the battle with Poros has also by this indication been accurately determined.
2. The same number is given by Arrian in the fourth chapter of his *Indika*, citing Megasthenes as his authority. He has given their names in the following order: Hydriotes, Hyphasis, Saranges, Neudros, Hydaspes, Sinaros, Akesines, Toutapos, Kophen, Malantos Soastos, Garroia, Parenos, Soparnos and Soanos. Some of these are mentioned as confluentes of the larger tributaries of the Indus.

as burnt up with fire and more fit to be inhabited by wild beasts than by human beings. He therefore relinquished the eastern parts, and directed his march to the southern, so that these parts became better known than the other (the Gangetic) parts. (Strabo XV. i. 32).

### The Southern March :

The country between the Hypanis and Hydaspes is said to contain nine nations and 5000 cities not less in size than Kos Meropis, but the number seems to be exaggerated. Nearly all the nations of importance by which the country between the Indus and the Hydaspes is inhabited have been already mentioned. Lower down, the people called the Sibai come next, but of these we have spoken already. Then succeed the Malloi and Oxydrakai, great nations. Among the Malloi, Alexander was in danger of losing his life from a wound he received in the capture of a small town.<sup>1</sup> The Oxydrakai, as we have stated, were fabled to be akin to Dionysos. Near Patalene lies the country of Mousikanos, that of Sabos<sup>2</sup> which has for its capital Sindomana, that of Portikanos,<sup>3</sup> and other

1. The Malloi occupied the district situated between the lower Akesines and the Hydraotes, which in Alexander's time joined the former river below Multan—a city which owes its name to the Malloi. For an account of Alexander's serious misadventure in attacking a stronghold of this warlike people, see Arrian's *Anab.* vi. 9. II, Curtius ix. 4, 5, Diodoros, xvii, 98, 99, Justin xii, 9, 10, Plutarch's *Alex.* c. 63, the *Itinerarium Alexandri*, c. 115, and Pseudo-Kallisthenes, III. iv.
2. Sabos is called Sambos by Arrian. His capital Sindomana, or Sindimana, has been satisfactorily identified with Sehwan, which stands on a site of very high antiquity, past which now flows the Indus. In Alexander's time, however, the river pursued a course from which Sindomana lay at a considerable distance to westward.
3. Portikanos is called by Arrian Oxykanos, while Diodoros and Curtius follow our author. Curtius calls his subjects Praesti,

chiefs whose dominions lay along the banks of the Indus. All these were conquered by Alexander, and last of all he reduced Patalene, which the Indus forms by splitting into two branches. Aristoboulos says that these two branches are 1000 stadia distant from each other, but Nearchos adds on 800 to that amount. Onesikritos again gives 2000 stadia as the length of each side of the island, which is cut off from the mainland in the shape of a triangle and about 200 stadia as the width of the river where it splits into two mouths. He calls the island Delta, and says that it equals in size the Egyptian Delta - but incorrectly; for the Egyptian Delta is said to have a base of 1300 stadia, and each of the sides to be less than the base. Patalene contains a considerable city Patala, which gives its name to the island\*. (Strabo, XV. i. 33).

### The Sea Coast:

Onesikritos says that the sea coast in this quarter abounds in swamps, and especially at the mouths of the rivers, on account of the mud, the tides, and the absence of land breezes, for in these parts the prevailing winds blow from the sea.<sup>1</sup> (Strabo, XV-i. 34)

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a name which represents the Sanskrit *prastha*, a 'table land'. General Cunningham places them to the west of the Indus in the level country in Alexander's time forty miles to eastward of it. The name Portikanos represents perhaps the Sanskrit *Partha*, 'a prince'. The dominions of the three kings here mentioned lay higher up the Indus than Strabo has indicated.

4. Aristoboulos is more accurate in his estimate here than Nearchos and Onesikritos, for the interval from the west to the east arm measures at present 125 miles. The sea front of the Egyptian Delta is underestimated, for its extent is not less than 160 miles. The name of *Patala* seems to be the Sanskrit word *patala*, 'a station for ships', from *pota*, 'a vessel'.

1. This description still holds good of these shores.

## The Ganges and its breadth :

A letter written by Crateros to his mother Aristopatra has been published which contains many other singular statements, and differs from every other writer, especially in saying that Alexander advanced as far as the Ganges. He says that he himself saw the river and the whales it produces, and gives such an account of its size, breadth, and depth as far exceeds rather than approaches credibility ; for that the Ganges is the greatest of known rivers in the three continents is a fact generally allowed ; next to it is the Indus, while the Danube ranks third, and the Nile fourth. But different writers report of it differently some assigning 30 and others 3 stadia as its least breadth. Megasthenes says that its ordinary breadth is 100 stadia and its least depth 20 fathoms.<sup>8</sup> (Strabo, XV. i. 35)

1. Krateros, who was one of Alexander's most distinguished generals, and next to Hephaestion, his greatest favourite was a Macedonian of Orestis. He commanded that division of Alexander's army which marched homewards from India by way of Seistan and the Kerman desert, and rejoined the rest of the army in Karmania. At Sousa he married Amastris, the niece of Darius and then led the discharged veterans back to Europe. In the division of the empire after Alexander's death, Macedonia, Greece, and other provinces fell to the share of Antipater and Krateros. In 321 B. C. he fell in battle against Eumenes, who honoured him with a magnificent funeral. It is difficult to believe that Krateros wrote such a letter as that mentioned in the text unless in jest. Plutarch, however, and the author of the '*Periplus of the Erythraean Sea*', represent Alexander as having advanced to the Ganges.
2. 'The exaggeration of Megasthenes is nothing in comparison of Aelian, who gives to the Ganges a breadth of 400 stadia.' - Falconer.

## Palibothra :

At the confluence of this river with another (the Erannoboas) is situated Palibothra, a city 80 stadia in length and 15 in breadth. It is of the shape of a parallelogram, and is surrounded by a wooden wall, pierced with loopholes for the discharge of arrows. It has a ditch in front for the purpose of defence and for receiving the sewage of the city. The people in whose country this place is situated are the most distinguished in all India and are called the Prasioi.<sup>1</sup> The king in addition to his

1. Palibothra, or Palimbothra, as it is less properly designated in Arrian, is now represented by the city of Patna, which extends for about ten miles along the right bank of the Ganges, a little above where it receives on the opposite side the waters of the Gandak. The name is a transcription of Pāliputra, the spoken form of Pātaliputra, the name of the ancient capital of Magadha. Its earliest designation, according to the *Rāmāyaṇa*, was Kauśāmbi, while its poetical was Kusumapura, 'the city of flowers'. According to Diodoros (ii. 39), it was founded by Herakles, who adorned it with many sumptuous palaces, settled within its walls a numerous population, and fortified it with deep trenches of great width, which he filled with water introduced from the river. It became the capital of the celebrated Sandrakottos (Chandragupta), whose empire extended from the Bay of Bengal to the foot of the Indian Kaukasos. For about eight centuries after his time it continued to be a great and flourishing city, adorned with a magnificent palace and many temples and other public buildings of great splendour. Its happy position at the junction of the Ganges and the Erannoboas or Son, made it a great and opulent seat of commerce. The wooden wall by which it is here said to have been surrounded, was seen still standing about the beginning of the fifth century of our era by the Chinese pilgrim Fa-Hian. To judge from the description he has given, Palibothra, or, as he calls it, Pa-lien-fu, had not then experienced any diminution of its prosperity. Causes, however, tending to its ruin must have been at work,

family name must adopt the surname of Palibothros, as Sandrokottos,<sup>2</sup> for instance, did, to whom Megasthenes

for when about two centuries later, another Chinese pilgrim, Hwen Thsiang visited the place, he found instead of a splendid metropolis nothing but heaps of ruins and an insignificant village consisting of about two or three hundred miserable houses. The ruins seen by this traveller now lie deep entombed below the foundations of the modern city. This fact was brought to light in 1876, when the workmen employed in digging a tank between the market place of Patna and its railway station discovered at a depth of some twelve or fifteen feet below the swampy surface the remains of a long brick wall with a line of palisades of strong timber running near and almost parallel to it, and slightly inclined towards it. It would thus appear that the wooden wall of Palibothra mentioned by Megasthenes was in reality a line of palisades running in front of a wall of brick. The Erannoboas is the river Son which entered the Ganges immediately to the west of Patna up till the year 1379, when with the caprice characteristic of Indian rivers, it forsook its old channel, so that the point where the two rivers now meet is some sixteen miles above Patna. Its name represents either the Sanskrit Hiranyavāha, carrying gold, or Hiranyabāhu, *having golden arms*. Pliny and Arrian agree with our author in calling the inhabitants of Palibothra, Prasii, a name which transliterates the Sanskrit Prāchya, i. e. Eastern, and which must, therefore, have been given them by the people of the Punjab.

2. The great Indian king called by the Greeks Sandrokottos has been on sufficient grounds identified with the Chandragupta mentioned in Buddhist writings as the Founder of the Mauryan dynasty of Magadha, to which Asoka, who made Buddhism the state religion of India, belonged. He was a native of the Punjab, and when a very young man had an opportunity, as Plutarch tells us, of seeing Alexander. He must soon afterwards have left his country for Palibothra which was at that time ruled by the last of the Nanda kings, called Xandrames by Diodoros, and less correctly Agrammes by Curtius. Here he was employed by a countryman of his own, Kānakya, a

was sent on an embassy. This custom also prevails among the Parthians, for all are called Arsakai, though

Brahman from Taxila, who put under his command a body of troops to be used against the king, from whom Kānakya had received some mortal insult. The conspiracy was foiled, and Sandrokottos, obliged to seek safety in flight, returned to the Punjab. A great crisis in the affairs of this province was then - impending, for the great Poros was soon afterwards treacherously murdered by Eudemos, the Greek Governor; and this dastardly crime, being fiercely resented by the natives, led them to form plots for the expulsion of their foreign masters. Fortune favoured their design, for Eudemos, having been recalled soon after the murder of Poros to succour Eumenes, led away with him a great part of the troops by which the Punjab was held in subjection. Sandrokottos, who had put himself at the head of the disaffected, expelled the Greek troops that still remained in the country, and made himself master of all the Indian provinces Alexander had conquered. He then turned his arms towards the regions of the Ganges, and having defeated Agrammes, put him to death and seated himself on the vacant throne. This took place in 315 B. C. - eight years after Alexander had passed away, leaving the world - a legacy of distracting wars which so engrossed the attention of his successors, that for some ten years after his death no attempt was made to recover his Indian conquests. Sandrokottos employed that interval in extending and consolidating his power. For the defence of his vast dominions he maintained an army so numerous and well disciplined, that when Seleukos Nikator, the King of Syria, somewhere about the year 305 B. C. led an expedition against him, the invasion, so far from being successful, terminated in a treaty, the conditions of which were altogether to the advantage of the Indian King, since Seleukos, in exchange for five hundred elephants, ceded to him a great portion of Ariana, and gave him his daughter in marriage. The alliance thus formed between the Kingdoms of India and Syria was maintained not only while these two kings lived but even for many years afterwards, when their thrones were filled by their successors.

each has his own peculiar name, as Orodes, Phraates,<sup>3</sup> or some other appellation. (Meg. frag. XV; Strabo XV. i. 36).

Our author in the sequel, quoting Megasthenes, gives us an insight both into the manners which prevailed at the court of Sandrokottos in Palibothra, and also into the system by which he administered the affairs of his empire, which after the treaty he made with Seleukos extended from the Bay of Bengal to the foot of the Indian Kaukasos. He died in the year 291 B. C. before he had reached his fifty-fifth year. It is surprising that Strabo, who makes a more liberal use of Megasthenes than of any other writer for his description of India, nevertheless stigmatises him as a mendacious writer who seldom deviates into truth. This charge, which is based on the accounts given by Megasthenes of certain fabulous Indian races, is stated in the first chapter of his second book, when he says: 'No faith whatever can be placed in Deimachos and Megasthenes. They coined the fables concerning men with ears large enough to sleep in, men without any mouths, without noses, with only one eye, with spider legs, and with fingers bent backwards. They renewed Homer's fables concerning the battles of the Cranes and the Pygmies, and asserted the latter to be three spans high. They told of ants digging for gold, of Pans with wedge-shaped heads of serpents swallowing down oxen and stags, 'horns and all'. Now it is certain that neither Megasthenes nor Deimachos, who was ambassador after him at the Palibothran court, coined these fables. That they were but fictions of the Indian imagination is clearly proved by the fact that the names by which Megasthenes designates the races in question are but translations or transliterations of their names as found in Sanskrit literature. Pliny also has mentioned these races and others besides in his seventh book about the beginning.

3. Arsakes the founder of the Parthian empire is variously represented by ancient writers as a Skythian, a Baktrian or a Parthian. He revolted from Syria in the reign of Antiochos II., in the year 250 B. C. Phraates was contemporary with Strabo.

### Beyond the Hypanis:

All the country beyond the Hypanis<sup>1</sup> is allowed to be very fertile, but little is accurately known regarding it. (Strabo, XV. i. 37)

### The Indus and The Ganges and their tributaries:

But I am unable to give with assurance of being accurate any information regarding the regions beyond the Hyphasis, since the progress of Alexander was arrested by that river. But to recur to the two greatest rivers, the Ganges and Indus, Megasthenes states that of the two the Ganges is much the larger and other writers who mention the Ganges agree with him; for besides being of ample volume even where it issues from its springs, it receives as tributaries the river Kainas, and the Erannoboas, and the Kossoanoss, which are all navigable. It receives, besides the river Sonos and the Sittokatis, and the Solomatis, which are also navigable, and also the Kondochates, and the Sambos, and the Magon and the Agoranis, and the Omalis. Moreover there fall into it the Kommenases, a great river, and the Kakouthis, and the Andomatis, which flows from the dominions of the Madyandinoi, an Indian tribe. In addition to all these, the Amystis, which flows past the city Katadupa, and the Oxymagis from the dominions of a tribe called the Pazalai,

1. The Hyapanis, usually called the Hyphasis, now the Beas is described by Diodoros as a river with a width of 7 stadia a depth of 6 fathoms, and a violent current, which made its passage difficult. He adds, agreeing herein with Curtius, that beyond it lay a desert which it would take some eleven or twelve days to cross. This statement seems at variance with that of our author, but can be easily reconciled with it if we suppose that, while Diodoros had in view the country beyond the Hypanis at a lower part of its course, Strabo's description was meant for the country lying near the mountains along its upper course.

and the Errenysis from the Mathai, an Indian tribe, unite with the Ganges. Regarding these streams Megasthenes

1. Arrian here enumerates seventeen tributaries of the Ganges. The number is given as nineteen by Pliny, who adds the Prinas and the Jomanes, which Arrian elsewhere (cap. viii.) mentions under the name of the Jobares. These tributaries have been nearly all identified by the researches of such learned men as Rennel, Wilford, Schlegel, Lassen, and Schwanbeck, M. de St.-Martin, in reviewing their conclusions, clears up a few points which they had left in doubt or wherein he thinks they had erred. I shall now show how each of the nineteen tributaries has been identified.

Kainas — This has been identified with the Kan, or Kena, or Kena, which however, is only indirectly a tributary of the Ganges, as it falls into the Jamnā. The Sanskrit name of the Kan is Šena and Schwanbeck (p. 36) objects to the identification that the Greeks invariably represent the Sanskrit ē by their η, and never by αι. St.-Martin attaches no importance to this objection, and gives the Sanskrit equivalent as Kaiana.

Erannoboas — As Arrian informs us (cap. x.) that Palimbothra (Pātaliputra. Patnā) was situated at the confluence of this river with the Ganges, it must be identified with the river Son, which formerly joined the Ganges a little above Bankipur, the western suburb of Patna, from which its embouchure is now 16 miles distant and higher up the Ganges. The word no doubt represents the Sanskrit Hiranyavāha (carrying gold) or Hiranyabāhu (having golden arms), which are both poetical names of the Son. Megasthenes, however, and Arrian, both make the Erannoboas and the Son to be distinct rivers, and hence some would identify the former with the Gandak (Sanskrit Gandakī), which, according to Lassen, was called by the Buddhists Hiranyavati, or 'the golden'. It is, however, too small a stream to suit the description of the Erannoboas, that it was the largest river in India after the Ganges and Indus. The Son may perhaps in the time of Megasthenes, have joined the Ganges by two channels, which he may have mistaken for separate rivers.

asserts that none of them is inferior to the Maiandros, at the navigable part of its course; and as for the Ganges,

Kosoanos — Cosoagus is the form of the name in Pliny, and hence it has been taken to be the representative of the Sanskrit Kaushiki, the river now called the Kosi. Schwanbeck, however, thinks it represents the Sanskrit *Kośavāha* ('Treasure bearing') and that it is therefore an epithet of the Son, like *Hiranyavāha* which has the same meaning. It seems somewhat to favour this view that Arrian in his enumeration places the Kosoanos between the Erannoboas and the Son.

Sonos — The Son, which now joins the Ganges ten miles above Dinapur. The word is considered to be a contraction of the Sanskrit Suvarna (Suvanna), 'golden' and may have been given as a name to the river either because its sands were yellow, or because they contained gold dust.

Sittokatis — It has not been ascertained what river was denoted by this name, but St. — Martin thinks it may be the representative of the *Sadākāntā* — a river now unknown, but mentioned in the *Mahābhārata* along with the *Kouśadhārā* (the Kosi), the *Sadānīrā* (the Karatoyā), and the *Adhrichya* (the Arteyi), from which it is evident that it belonged to the northern parts of Bengal.

Solomatis — It has not been ascertained what river was denoted by this name. General Cunningham in one of his maps gives the Solomatis as a name of the Saranju or Sarju, a tributary of the Ghagrā while Benfey and others would identify it with the famous Sarasvatī or Sarsutī, which, according to the legends, after disappearing underground, joined the Ganges at Allahabad. There is more probability, however, in Lassen's suggestion that the word somewhat erroneously transliterates *Sarāvatī*, the name of a city of Kosala mentioned by Kālidāsa and in the Purānas, where it appears generally in the form *Śrāvasti*. This city stood on a river which, though nowhere mentioned by name, must also have been called *Śarāvatī*, since there is an obvious connection between that name and the name by which the river of that district is now known — the Rapti.

it has a breadth where narrowest of one hundred stadia, while in many places it spreads out into lakes, so that

Kondochates — Now the Gandak, in Sanskrit, Gandaki or Gandakavati, — because of its abounding in a kind of alligator having a horn like projection on its nose. It skirted the eastern border of Kośala joining the Ganges opposite Palibothra.

Sambos — This has no Sanskrit equivalent. It perhaps designated the Gumti, which is said to go by the name of the Sambou at a part of its course below Lucknow.

Magon — According to Mannert the Rāmgaṅgā, but much more probably the Mahānada, now the Mahona, the principal river of Magadha, which joins the Ganges not far below Patna.

Agoranis — According to Rennel the Ghagrā-a word derived from the Sanskrit Gharghara ('of gurgling sound') but according to St.-Martin it must be some one or other of the Gaouris so abundant in the river nomenclature of Northern India. The vulgar form is Gaurans.

Omalis has not been identified but Schwanbeck remarks that the word closely agrees with the Sanskrit Vimala ('stainless'), a common epithet of rivers.

Kommenases — Rennel and Lassen identify this with the Karmanasa (*bonorum operum destructrix*), a small river which joins the Ganges above Baxar. According to a Hindu legend whoever touches the water of this river loses all the merit of his good works, this being transferred to the nymph of the stream.

Kakouthis — Mannert erroneously takes this to be the Gumti. Lassen identifies it with the Kakouttha of the Buddhist chronicles, and hence with the Bagmatti, the Bhagavati of Sanskrit.

Andomatis — Thought by Lassen to be connected with the Sanskrit Andhamati (*tenebricosus*), which he would identify, therefore, with the Tāmasā, (now the Tonsa), the two names being identical in meaning; but, as the river came from the country of the Madyandini (Sanskrit Madhyandina, *meridionalis*) — that is, the people of the South — Wilford's conjecture that the Andomatis is the Dammuda, the river

when the country happens to be flat and destitute of elevations the opposite shores cannot be seen from each other. The Indus presents also, he says, similar characteristics. The Hydraotes, flowing from the dominions of the Kambistholi, falls into the Akesines after receiving the Hyphasis in its passage through the Astrybai, as well

which flows by Bardwan, is more likely to be correct. The Sanskrit name of the Dammuda is Dharmadaya.

Amystis — The city Katadupa, which this river passes, Wilford would identify with Katwa or Cutwa, in Lower Bengal, which is situated on the western branch of the delta of the Ganges at the confluence of the Adjī. As the Sanskrit form of the name of Katya should be Katadvīpa (dvīpa, an island), M. de. St.-Martin thinks this conjecture has much probability in its favour. The Amystis may therefore be the Adjī or Ajavati as it is called in Sanskrit.

Oxymagis — The Pazalai or Passalai, called in Sanskrit Pankala, inhabited the Doab, and through this or the region adjacent flowed the Ikshumati ('abounding in sugarcane'). Oxymagis very probably represented this name since the letters *P* and *T* in Greek could readily be confounded. The form of the name in Megasthenes may have been Oxymetis.

Errenysis closely corresponds to Varanasi, the name of Banaras in Sanskrit — so called from the rivers Varana and Asi, which join the Ganges in its neighbourhood. The Mathai, it has been thought, may be the people of Magadha. St.-Martin would fix their position in the time of Megasthenes in the country between the lower part of the Gumti and the Ganges, adding that as the Journal of Hiwen Thsang places their capital, Mātipura at a little distance to the east of the upper Ganges near Gangādvāra, now Hardwar, they must have extended their name and dominion by the traveller's time far beyond their original bounds. The Prinas, which Arrian has omitted, St. Martin would identify with the Tamasā, which is otherwise called the Parnāsa and belongs to the same part of the country as the Kainas, in connection with which Pliny mentions the Psinas.

as the Saranges from the Kekians, and the Neudros from the Attakenoi. The Hydaspes again, rising in the dominions of the Oxydrakai, and bringing with it the Sinaros, received in the dominion of the Arispai, falls itself into the Akesines, while the Akesines joins the Indus in the dominions of the Malloi but not until it has received the waters of a great tributary, the Toutapos. Augmented by all these confluent streams the Akesines succeeds in imposing its name on the combined waters, and still retains it till it unites with the Indus. The Kophen, too, falls into the Indus, rising in Peukelaitis, and bringing with it the Malantos, and the Soastos, and the Garroia. Higher up than these the Parenos and Saparnos, at no great distance from each other, empty themselves into the Indus, as does also the Soanos, which comes without a tributary from the hill-country of the Abissareans.<sup>8</sup>

2. Tributaries of the Indus—Arrian has here named only 13 tributaries of the Indus (in Sanskrit Sindhu, in the *Periplus of the Erythrean Sea* Sinthos), but in his *Anabasis* (v. 6) he states that the number was 15, which is also the number given by Strabo. Pliny reckons them at 19.

Hydraotes—Other forms are Rhouadis and Hyarotis. It is now called the Ravi, the name being a contraction of the Sanskrit Airāvati, which means 'abounding in water'; or 'the daughter of Airāvat', the elephant of Indra, who is said to have generated the river by striking his tusk against the rock whence it issues. His name has reference to his 'ocean' origin. The name of the Kambistholai does not occur elsewhere. Schwanbeck (p. 33) conjectures that it may represent the Sanskrit Kapisthala, 'ape-land', the letter *m* being inserted, as in 'Palimbothra'. He rejects Wilson's suggestion that the people may be identical with the Kambojae. Arrian errs in making the Hyphasis a tributary of the Hydraotes, for it falls into the Akesines below its junction with that river. See on this point St.-Martins *Etude* p. 396.

According to Megasthenes most of these rivers are navigable. We ought not, therefore, to distrust what we

Hyphasis (other forms are Bibasis, Hypasis, and Hypanis) In Sanskrit the Vipāśā, and now the Byasa or Bias. It lost its name on being joined by the Śatadru, 'the hundred channelled', the Zaradros of Ptolemy, now the Satlej. The Astrobai are not mentioned by any writer except Arrian.

Saranges—According to Schwanbeck, this word represents the Sanskrit Saraṅga, 'six-limbed'. It is not known what river is designated. The Kekians through whose country it flowed, were called in Sanskrit, according to Lassen, Sekaya.

Neudros is not known. The Attakenoi are likewise unknown, unless their name is another form of Assakenoi.

Hydaspes—Bidaspes is the form in Ptolemy, which makes a nearer approach to its Sanskrit name—the Vitastā. It is now the Behut or Jhelam; called also by the inhabitants on its banks the Bedusta, 'widely spread'. It is the 'fabulosus Hydaspes' of Horace, and the 'Medus (i. e. Eastern) Hydaspes' of Virgil. It formed the western boundary of the dominions of Poros.

Akesines—Now the Chenab : its Sanskrit name Asikñī ('dark coloured') is met with in the hymns of the Veda. It was called afterwards Chandrabhāgā (*portiolunoe*). This would be represented in Greek by Sandrophagos,—a word in sound so like *Androphagos* or *Alexandrophagos* ('devourer of Alexander') that the followers of the great conqueror changed the name to avoid the evil omen,—the more so, perhaps, on account of the disaster which befell the Makedonian fleet at the turbulent junction of the river with the Hydaspes. Ptolemy gives its name as *Sandabaga* (*Sandabala* by an error on the part of copyists), which is an exact transcription of the Prākrit Chandabāgā, of which word the *Cantabra* of Pliny is a greatly altered form. The Malli, in whose country this river joins the Indus, are the Mālava of Sanskrit, whose name is prescribed in the Multan of the present day.

Toutapos—Probably the lower part of the Śatadru or Satlej.

are told regarding the Indus and the Ganges, that they are beyond comparison greater than the Ister and the

Kophen — Another form of the name, used by Strabo, Pliny etc. is Kophes, -etis. It is now the Kabul river. The three rivers here named as its tributaries probably correspond to the Suvāstu, Gaurī, and Kampana mentioned in the 6th book of the *Mahābhārata*. The Soastos is no doubt the Suvāstu, and the Garaea the Gaurī. Curtius and Strabo call the Suastus the Choaspes. According to Mannert the Suastus and the Garaea or Guraeus were identical. Lassen, however, (*Ind. Alterthums*. 2nd ed. II. 673 ff.), would indentify the Suastus with the modern Suwad or Svāt, and the Garaeus with its tributary the Panjkora; and this is the view adopted by Cunningham. The Malamantos some would identify with the Choes (mentioned by Arrian, *Anabasis* iv. 25) which is probably represented by the Kameh or Khonar, the largest of the tributaries of the Kabul; others, however, with the Panjkora, while Cunningham takes it to be the Bara, a tributary which joins the Kabul from the south. With regard to the name Kophes this author remarks: 'The name of Kophes is as old as the time of the Vedas, in which the Kubhā river is mentioned (Roth first pointed this out; conf. Lassen, *ut. sup.*) as an affluent of the Indus; and, as it is not an Aryan word, I infer that the name must have been applied to the Kabul river before the Aryan occupation, or at least as early as B. C. 2500. In the classical writers we find the Choes, Kophes, and Choaspes rivers to the west of the Indus; and at the present day we have the Kunar, the Kuram, and the Gomal rivers to the west, and the Kunihar river to the east of the Indus—all of which are derived from the Skythian *ku* 'water'. It is the guttural 'form of the Assyrian *hu* in 'Euphrates' and 'Eulaeus', and of the Turki *su* and Tibetan *chu*, all of which mean 'water' or river. Ptolemy the Geographer mentions a city called Kabura, situated on the banks of the Kophen, and a people called Kabolite.

Parenos — Probably the modern Burindu.

Saparnos — Probably the Abbasin.

Nile.' In the case of the Nile we know that it does not receive any tributary, but that, on the contrary, in its passage through Egypt its waters are drawn off to fill the canals. As for the Ister, it is but an insignificant stream at its sources, and though it no doubt receives many confluents, still these are neither equal in number to the confluents of the Indus and Ganges, nor they are navigable like them, if we except a very few,—as, for instance, the Inn, and Save which I have myself seen. The Inn joins the Ister where the Noricans march with the Rhaetians, and the Save in the dominions of the Pannonians, at a place which is called Taurunum.<sup>3</sup> Some one may perhaps know other navigable tributaries of the Danube, but the number certainly cannot be great. (Megasthenes Frag. XX; Arrian Frag. IV).

#### Numbers and magnitude of Indian rivers:

Now if anyone wishes to state a reason to account for the number and magnitude of the Indian rivers let him state it. As for myself I have written on this point as on others, from hearsay; for Megasthenes has given the names even of other rivers which beyond both the Ganges and the Indus pour their waters into the Eastern Ocean and the outer basin of the Southern Ocean, so that he asserts that there are eight and fifty Indian rivers which are all of them navigable. But even Megas-

Scanus represents the Sanskrit Suvana, 'the sun', or 'fire' now the Svan. The Abissaraeans, from whose country it comes, may be the Abisara of Sanskrit: Lassen, *Ind. Alt.* II. 163 A king called Abisāres is mentioned by Arrian in his *Anabasis* (iv. 7). It may be here remarked that the names of the Indian kings, as given by the Greek writers, were in general the names slightly modified of the people over whom they ruled.

3. Taurunum - The Modern Semlin.

thenes, so far as appears, did not travel over much of India though no doubt he saw more of it than those who came with Alexander, the son of Philip, for, as he tells us, he resided at the court of Sandrakottos, the greatest king in India, and also at the court of Poros, who was still greater than he. ( Megasthenes Frag. XX ; Arrian Frag. V ).

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### The river Silas :

In the mountainous country there is said to be a river, the Silas, on the surface of which nothing will float. Demokritos, who had travelled over a great part of Asia, disbelieves this, and so does Aristotle, although some atmosphere are so rare that they cannot sustain the flight of birds. Among vapours, moreover, which rise upwards some have the power of attracting to themselves and, as it were, absorbing substances which fly over them, just as amber attracts straw and the magnet iron, and a similar power perhaps exist in water. These matters, however, belong to physics and what concerns floating bodies, so that their investigation must be referred to these sciences.<sup>1</sup> ( Strabo, XV. 1.38 ).

1. Arrian in the sixth chapter of his *Indika* gives from Megasthenes the following account of this river. Its name is the Silas ; it flows from a fountain, called after the river, through the country of the Sileoi, who are called after the river and the fountain ; the water possesses this kind of property, that there is nothing which it can buoy up, nor anything which can swim or float in it, but everything sinks down to the bottom, so that nothing in the world is less substantial or more like air than this water. Diodoros ( ii. 37 ) mentions the Silas in somewhat similar terms. Pliny evidently refers to it, but under a different name. 'Ctesias,' he says, 'relates that there is a lake among the Indians called Side ( v. 1. Lide ) on which nothing floats, but everything sinks ( N. H. xxxxi. 18 ).

### Silas :

There is in India a river called the Silas named after the fountain from which it flows, on which nothing will float that is thrown into it, but everything sinks to the bottom, contrary to the usual law. (Meg. Frag. XXII).

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(Megasthenes says) that in the mountainous country is a river, the Silas, on the waters of which nothing will float. Demokritos, who had travelled over a large part of Asia, disbelieves this, and so does Aristotle. (Meg. Frag. XXIII).

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Let this be said by way of a digression to discredit the accounts which some writers have given of the Indians beyond the Hyphasis, for those writers who were in Alexander's expedition are not altogether unworthy of our faith when they describe India as far as the Hyphasis. Beyond that limit we have no real knowledge of the country: since this is the sort of account which Megasthenes gives us of an Indian river — Its name is the Silas; it flows from a fountain, called after the river, through the dominions of the Silaeans, who again are called after the river and the fountain; the water of the river manifests this singular property — that there is nothing which it can buoy up, nor anything sinks down to the bottom, so that there is nothing in the world so thin and unsubstantial as this water. (Arrian Frag. VI).

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Lassen has illustrated this fable from Indian literature: 'The Indians think that the river Silas is in the north, that it petrifies every thing plunged in it, whence everything sinks and nothing swims.' (Conf. *Mahābhārata*, ii. 1858. *Śila* is the Sanskrit word for a stone.

## CHAPTER III

### Social Divisions, Religious life, and Philosophers: Of the seven castes among the Indians

#### The Philosophers :

He (Megasthenes) says that the population of India is divided into seven castes.<sup>1</sup> The first in rank but

1. This account of the Indian castes which Strabo has extracted from Megasthenes is to be found also in Diodorus (ii. 40-42), and in the *Indika* of Arrian (cc. II and 12). It is well known that in the Hindu code of laws attributed to Manu, the number of castes is stated to be four and not seven as in Megasthenes. Was Megasthenes then in error? We incline to think he was not, but that he had ascertained from the Brahmans whom he no doubt consulted on all important matters about which he meant to write, that the Indian community was divided into seven distinct orders, to each of which were assigned separate occupations which its members exclusively discharged. The four castes of Manu were the following:
  1. The Sacerdotal caste, consisting of the Brahmans who concerned themselves with religion, learning, and legislation.
  2. The Kshatriya or Military caste, entrusted with the government and defence of the states.
  3. The Vaisyas, comprising those engaged in the production and distribution of commodities—agriculturists and traders.
  4. The Sudras or Servile Caste, comprising those who ministered to the wants of the three upper classes, the members of which were styled the twice-born.A moment's reflection will show that this is a scientific division of the members of the body politic applicable not only to the Indian community, but to any political community wherever it may exist. Manu's principle of division, it will be seen, is the same as that of Megasthenes, namely, difference of occupation. The Indian name for Caste is *Varna*, which means colour. The Arayan conquerors of India were of a fairer complexion than the races which occupied the country before their coming, and hence it has been

smallest in number are the philosophers. Persons who wish to offer sacrifices or perform other sacred rites employ their services on their private account, but the kings employ them on the public account, at what is called the Great Assembly, where at the beginning of the New Year all the philosophers repair to the king at the gates. Here any of them who may have committed anything useful to writing, or observed any means for improving the crops and the cattle, or anything of advantage to the state, declares it publicly. If any one is detected giving false information thrice, the law enjoins him to be silent for the rest of his life, but he who proves to have been correct in his observation is exempted from paying any taxes or contributions.<sup>8</sup> (Meg. Frag. XXIII, Strabo XV. i. 39).

### The Husbandmen:

The second caste consists of the husbandmen, who form the bulk of the population and are of a very mild and gentle disposition. They are exempted from military service, and cultivate their lands undisturbed by fear. They do not go to cities, either on business or to take part in their tumults. It therefore frequently happens

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supposed that the distinction of caste had its origin in difference of race. Whether the Code of Manu was compiled before or after the time of Megasthenes is a question which has not yet been conclusively settled.

2. In the extracts of Diodoros and Arrian will be found a few further particulars regarding this caste that they do no bodily labour—that they go naked, living in winter in the open air, and in summer in meadows and low grounds under large and shady trees, and that they live upon fruits and the bark of trees if the bark is sweet and nutritious. Strabo again stands alone in stating that the Brahman who makes correct observations is rewarded by exemption from payment of taxes and other contributions.

that at the same time, and in the same part of the country men may be seen marshalled for battle and risking their lives against the enemy, while other men are ploughing or digging in perfect security under the protection of these soldiers. The whole of the land belongs to the crown, and husbandmen till it on condition of receiving as wages one fourth of the produce.<sup>1</sup> (Meg. Frag. XXXIII, Strabo XV. i. 40).

### Shepherds and Hunters :

The third caste consists of shepherds and hunters, who alone are permitted to hunt and to keep cattle and to sell beasts of burden or to let them out on hire. In return for clearing the land of wild beasts and birds which infest sown fields, they receive an allowance of corn from the king. They lead a wandering life and dwell in tents. No private person is permitted to keep a horse or an elephant. The possession of either is regarded as a royal privilege. These animals are under the charge of grooms.<sup>2</sup> (Meg. Frag. XXXIII, Strabo, XV. i. 41).

1. Diodoros states this fact less concisely. The ryots, he says, pay the king a land rent (*χώρας μισθίους*), because all the land in India is the property of the Crown, and no private person can own land. Besides the rent, however, they pay into the royal treasury the fourth *part of the produce*. The institutes of Manu recognise land as the property of him who first cleared and tilled it, and to this day in some parts of India the maxim of the ryot is: 'The government is owner of the rent, but I am the master of the land'. He is, however, the perpetual lessee rather than the proprietor of the acres he cultivates.

2. Diodoros and Arrian place neatherds (*Βούκαλος*) as well as shepherds in this class, but do not mention hunters. Dr. Burgess has noted that shepherds and hunters were not a caste of Hindus, but were probably tribes like the Abhirs or

### Traders and bodily labourers :

After hunters and shepherds, the fourth caste follows, consisting, he says, of those who work at trades vend wares, and are employed in bodily labour. Some of these pay taxes, and render to the state certain prescribed services. But the armour-makers and shipbuilders receive wages and provisions from the kings for whom alone they work. The commander-in-chief supplies the army with weapons, and the admiral of the fleet lets out ships on hire both to those who undertake voyages and to merchants.<sup>1</sup> (Meg. Frag. XXXIII, Strabo, XV. i. 46).

### Fightingmen :

The fifth caste consists of fighting men, who, when not engaged in active service pass their time in idleness and drinking. They are maintained at the king's expense, and hence are always ready, when occasion calls to take the field, for they carry nothing of their own with them.<sup>2</sup> (Meg. Frag. XXXIII, Strabo, XV. i. 47).

### Inspectors :

The sixth caste consists of the inspectors. To them is entrusted the superintendence of all that goes on, and of marking reports privately to the king. The city inspectors employ as their coadjutors the courtesans of

Ahirs, Dhangars, etc. Arrian states that this caste pays tribute to the king in kind. This appears to be inconsistent with our author's statement that the king gives its members an allowance of corn. At the present day the Indian Government grants rewards to destroyers of snakes and wild beasts.

1. River voyages and river traffic are here meant, as is shown by a reference to the corresponding passage in Arrian (*Indika*, c. 12)
2. Arrian, in describing this class, states they received such liberal pay that the maintained others besides themselves, and kept servants to attend on them in the camp, to clean their arms and to take care of their horses, elephants, and chariots. — *Indika*. c. 12.

the city, and the inspectors of the camp the courtesans who follow the army. The best and most trustworthy men are appointed to fill these offices.<sup>1</sup> (Meg. Frag. XXXIII, Strabo, XV i. 48).

### Counsellors and Assessors :

The seventh caste consists of the counsellors and assessors of the king. To them belong the offices of state, the tribunals of justice and the general administration of public affairs. No one is allowed to marry out of his own caste, or to exchange one profession or trade for another, or to follow more than one business. An exception is made in favour of a member of the philosopher caste on account of his superior merit.<sup>2</sup> (Meg. Frag. XXXIII, Strabo, XV. i. 49).

### The Seven Castes :

But further in India the whole people are divided into about seven castes. Among these are the Sophists, who are not so numerous as the others, but hold the supreme place of dignity and honour,—for they are under no necessity of doing any bodily labour at all, or of contributing from the produce of their labour anything to the common stock, nor indeed is any duty absolutely binding on them except to perform the sacrifices offered to the gods on behalf of the state. If

1. Arrian calls this class *επισκόποι*, but Diodoros agrees with Strabo in calling them *φόροι*. The terms however are synonymous and mean *overseers*.
2. Arrian (Indika, c. 12) specifies the officials comprised in this governing class. In point of numbers, he says this is a small class, but it is distinguished by superior wisdom and regard for justice. From its ranks are chosen governors, provincial rulers, deputy governors, treasurers, generals of the army, admirals of the fleet, quaestors and the superintendents of agriculture.

anyone, again, has a private sacrifice to offer, one of these sophists shows him the proper mode, as if he could not otherwise make an acceptable offering to the gods. To this class the knowledge of divination among the Indians is exclusively restricted, and none but a sophist is allowed to practice art. They predict about such matters as the seasons of the year, and any calamity which may befall the state; but the private fortunes of individuals they do not care to predict, either because divination does not concern itself with trifling matters, or because to take any trouble about such is deemed unbecoming. But if anyone fails thrice to predict truly, he incurs, it is said, no further penalty than being obliged to be silent for the future, and there is no power on earth able to compel that man to speak who has once been condemned to silence. These sages go naked, living during winter in the open air to enjoy the sunshine, and during summer, when the heat is too powerful, in meadows and low grounds under large trees, the shadow whereof Nearchos says extends to five plethra in circuit, adding that even ten thousand men<sup>1</sup> could be covered by the shadow of a single tree. They live upon the fruits which each season produces, and on the bark of

1. Cf. the description of the same tree quoted from *Onesikritos*, Strabo XV. i. 21.

Cf. also Milton's description of it in *Paradise Lost*, bk. ix., 11, 1103 et seqq :-

"There soon they chose  
The fig tree, not that kind for fruit renowned,  
But such as at this day to Indians known,  
In Malabar or Deccan spreads her arms,  
Branching so broad and long that in the ground.  
The bended twigs take root, and daughters grow  
About the mother tree, a pillared shade  
High overarched, and echoing walks between."

trees,— the bark being no less sweet and nutritious than the fruit of the date palm.

### Tillers of the soil :

After these, the second caste consists of the tillers of the soil, who form the most numerous class of the population. They are neither furnished with arms, nor have any military duties to perform, but they cultivate the soil and pay tribute to the kings and the independent cities. In time of civil war the soldiers are not allowed to molest the husbandmen or ravage their lands: hence while the former are fighting and killing each other as they can, the latter may be seen close at hand tranquilly pursuing their work,— perhaps ploughing, or gathering in their crops, pruning the trees, or reaping the harvest.

### Herdsmen :

The third caste among the Indians consists of the herdsmen, both shepherds and neatherds; and these neither live in cities nor in villages, but they are nomadic and live on the hills. They too are subject to tribute, and this they pay in cattle. They scour the country in pursuit of fowl and wild beasts.

### Handicraftmen and retail dealers :

The fourth caste consists of handicraftmen and retail dealers. They have to perform gratuitously certain public services, and to pay tribute from the products of their labour. An exception, however, is made in favour of those who fabricate the weapons of war, and not only so, but they even draw pay from the state. In this class are included shipbuilders, and the sailors employed in the navigation of the rivers.

### Warriors :

The fifth caste among the Indians consists of the warriors, who are second in point of numbers to the

husband men, but lead a life of supreme freedom and enjoyment. They have only military duties to perform. Others make their arms, and others supply them with horses, and they have others to attend on them in the camp, who take care of their horses, clean their arms, drive their elephants, prepare their chariots, and act as their charioteers. As long as they are required to fight they fight, and when peace returns they abandon themselves to enjoyment,— the pay which they receive from the state being so liberal that they can with ease maintain themselves and others besides.

#### **Superintendents :**

The sixth caste consists of those called superintendents. They spy out what goes on in the country and town, and report everything to the king where the people have a king, and to the magistrates where the people are self-governed,<sup>1</sup> and it is against use and wont for these to give in a false report; but indeed no Indian is accused of lying.

#### **Councillors :**

The seventh caste consists of the councillors of state, who advise the king, or the magistrate of self governed cities, in the management of public affairs. In point of the numbers this is a small class, but it is distinguished by superior wisdom and justice, and hence enjoys the prerogative of choosing governors, chiefs of provinces, deputy governors, superintendents of the

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1. There have always been extensive tracts without any common head, some under petty chiefs, and some formed of independent villages: in troubled times, also towns have often for a long period carried on their own government. All these would be called republics by the Greeks, who would naturally fancy their constitutions similar to what they had seen at home." Elphinstone's History of India, p. 240.

treasury, generals of the army, admirals of the navy, controllers, and commissioners who superintend agriculture. (Arrian Frag. XII).

#### Intermarriage prohibited :

The custom of the country prohibits intermarriage between the castes: for instance, the husbandman cannot take a wife from the artizan caste, nor the artizan a wife from the husbandman caste. Custom also prohibits anyone from exercising two grades, or from changing from one caste to another. One cannot, for instance, become a husbandman if he is a herdsman, or become a herdsman if he is an artizan. It is permitted that the sophist only be from any caste: for the life of the sophist is not an easy one, but the hardest of all. (Arrian Frag. XII).

#### Magistrates :

Of the magistrates some have the charge of the market, others of the city, others of the soldiery. Some superintend the rivers, measure the land, as in Egypt, and inspect the sluices by which water is let out from the main canals into their branches, so that every one may have an equal supply of it. These persons have charge also of the hunters, and have the power of rewarding or punishing them according to their deserts. They collect the taxes and superintend the occupations connected with land, as those of the woodcutters, the carpenters, the blacksmiths, and the miners. They make the public roads, and at every ten stadia set up a pillar to indicate the byroads and distances. (Strabo, XV. i. 50).

#### Administrative divisions :

Those who have charge of the city are divided into six bodies of five each. The first have the inspection of everything relating to the industrial arts, the second

entertain strangers; assign them lodgings, observe their mode of life by means of the attendants whom they attach to them, and escort them out of the country, or, if they die, send home their property, take care of them in sickness, and when they die, bury them. The third body consists of those who enquire at what time and in what manner births and deaths occur, not only for the purpose of imposing a tax, but also of preventing births or deaths, whether among the high or the low from being concealed. The fourth body is occupied with retail and barter. Its members have charge of weights and measures, and see that products in season are sold by public notice. No one is allowed to deal in a variety of articles unless he pays a double tax. The fifth body supervises manufactured articles and sells them by public notice. What is new is sold separately from what is old, and there is a fine imposed for mixing them together. The sixth and last body consists of those who collect the tenth of the price of the articles sold. Fraud in the payment of this tax is punished with death.<sup>1</sup> Such are the functions which these bodies separately discharge. In their collective capacity they have charge both of their special departments and of matters affecting the public welfare, such as the repairs of public works, the regulation of prices, and the care of markets, harbours, and temples. (Strabo, XV. i. 51).

#### Military administration :

Next to the city magistrates there is a third governing body which directs military affairs. This also consists

1. The Laws of Manu also specify this as a penal offence, but we learn from this authority that the king claimed only a twentieth of the price of goods sold, and that fraud was not so severely punished as is stated in the text.

of six divisions with five members to each one division is associated with the admiral of the fleet, another with superintendent of the bullock teams, used for transporting military engines, food for the soldiers, provender for the cattle, and other military requisites. They supply attendants who beat a drum, and others who carry gongs; grooms also for the horses, and mechanists and their assistants. By the sound of the gong they send out foragers to bring in grass, and by rewards and punishments ensure the work being done with despatch and safety. The third division has charge of the infantry, the fourth of the horses, the fifth of the war chariots, and the sixth of the elephants. There are royal stables for the horses and elephants, and also a royal magazine, for the arms, because soldier has to return his arms to the magazine, and his horse and his elephant to the stables. They use the elephant without bridles. The chariots are drawn on the march by oxen, but the horses are led along by a halter, that their legs may not be galled and inflamed, nor their spirits damped by drawing chariots. In addition to the charioteer two men-at-arms sit beside him in the chariot. The war-elephant carries four men three who shoot arrows from his back- and the driver.<sup>1</sup> (Strabo, XV. i. 52).

1. Here Arrian supplies from Megasthenes information omitted by Strabo. The custom of the country prohibits intermarriage between the castes; for instance, the husbandman cannot take a wife from the artisan class, nor the artisan a wife from the husbandman class. Custom also prohibits any one from exercising two trades, or from changing from one caste to another. One cannot, for instance, become a husbandman from a herdsman, or a herdsman from an artisan. This only is permitted, that the sophist (i. e. philosopher) become of any class whatever (*εκ πατοσυγερος γενεσατ*) for the life of the sophist is not an easy one, but the severest of "

## Worshippers of Dionysos and Herakles :

Speaking of the philosophers, he says that those who inhabit the mountains are worshippers of Dionysos, showing as proofs that *he had come among them* the wild vine which grows in their country only, and the ivy, and the laurel, and the myrtle, and the box-tree, and other evergreens, none of which are found beyond the Euphrates except a few in parks, which it requires great care to preserve. Some of their customs are of a Dionysiac character, their wearing muslin robes and turban, using perfumes, dressing themselves in garments dyed of florid hues, and their kings marching out from the palace to the beat of the drum and the jingling of the musical bells. But the philosophers who live in the plains worship Herakles.<sup>1</sup> These accounts are

The expression 'become of any class' does not imply that the sophists who formed the Brahman caste could become a member of any of the lower orders, but merely that they were permitted, as they still are, to do the work of any of the castes. Pliny (vi. 22) thus summarises the accounts given of the castes: 'Life among the more civilised peoples of India is spent in diversified occupations. Some till the ground, others serve as soldiers, others export their wares and import others from abroad, the men of highest rank and wealth rule the state, administer justice, and are the king's assessors. The fifth class devoted to philosophy (*sapientia*), which is there much cultivated and esteemed and mainly applied to the service of religion, always end their life by a voluntary death on a funeral pile ignited beforehand. Besides these classes there is one which leads a half-savage life full of immense labour — that of hunting and taming elephants.' This sketch of the system by which Sandrokottos governed his vast dominions has not been extracted by Arrian — we are indebted for it solely to Strabo.

1. The Greeks who accompanied Alexander into India identified the gods whom they saw principally worshipped by the

fabulous, and are contradicted by many writers, especially what is said about the vine and about wine. For the greater part of Armenia, and the whole of Mesopotamia and Media as far as Persia and Karmania, lie beyond the Euphrates, and throughout a great part of these countries there are flourishing vineyards which produce wine of an excellent quality. (Strabo, XV. i. 58).

inhabitants with certain of their own gods. In this they but followed the usual practice of their countrymen who were ever ready to recognise the identity of any foreign god with some one or other of their own pantheon who possessed somewhat similar attributes or was worshipped with somewhat similar rites. Thus they had no difficulty in deciding that Šiva was no other than Dionysos when they observed that the worship of the former was celebrated with licentious rites and strains of rattling music such as accompanied the celebration of the Bacchic orgies. Besides, as Schwanbeck has remarked, there was nothing easier, after Euripides had invented the story that Dionysos had wandered over the East, than to suppose that the god of exuberant fecundity had penetrated to India, a country famous for its wonderful fertility. Under the name of Herakles again, Megasthenes describes either Krishna or his brother Balarama, who were both incarnations of Vishnu. This seems an all but inevitable inference when we combine with the fact that these two brothers were natives of Mathura (now Muttra,) on the river Jamna, the statement of Megasthenes that 'Herakles was worshipped by the inhabitants of the plain—especially by the Sourasenai, an Indian tribe possessed of two large cities, Methora and Kleisobara (Krishnapura), and who had a navigable river, the Jobares, flowing through their territories.' Now Methora is evidently a transliteration of Mathura, and Jobares a copyist's error for Jomanes, i. e., the river Jamna or Yamuna, on which Muttra is situated. The Sourasenai are the inhabitants of the district around Mathura, of which the Sanskrit name was Surasena.

## Two sets of philosophers :

According to another principle of division, he makes two sects of the philosophers, one of which he calls the Brachmanes and the other the Garmanes.<sup>1</sup> The Brachmanes are held in higher estimation, for they agree more exactly in their opinions. From the time of their conception in the womb they are under the care and guardianship of learned men who go to the mother, and under the pretence of using some incantations for the welfare of herself and her unborn child, in reality give her prudent hints and counsels, and the women who listen to them most willingly are thought to be the most fortunate in their offspring. After their birth the child-

1. The word *Garmanes* is beyond question an erroneous transcription in the single text of Strabo from which all the existing codices have been copied. It should be *Sarmanes*, which represents the Sanskrit *Śarmanā*, 'an ascetic.' Schwanbeck, commenting on this division of the Indian philosophers, says: 'The main question is, who are the Sarmanae. While some day they are Buddhists, others say they are not, and weighty arguments are adduced on both sides. The opinion of those, however, seems to come nearer the truth who contend that they are Buddhists, so that I would prefer to think that Megasthenes was the first who has mentioned the Buddhists. He both applied himself to investigate the doctrine of the Brahmanas, and though he did not fully succeed in this, he nevertheless made many acute observations on the subject. It did not, for instance, escape him that Brahmanas recognise five principles of things of which all things consist, for they add a fifth, which they call *ākāśa*, i. e. eather. Schwanbeck then subjoins a list of the other classical texts which bear on this subject: Atrian, *Anab.* vii. 2. 5-9; Pseudo-Origen. *Philosoph.* 24; Pallad. *de. Brachm.* p. 14 seq.; Apoll. iii. 34; Clem. Alex. *Strom.* i; Euseb. *Praepar ev.* ix. 6; Cyril *Contra Julian* iv. These texts will be found translated in my edition of the *Frangments of Megasthenes*.

ren are under the care of one person after another, and as they advance in years their masters are men of superior accomplishments.<sup>2</sup> The philosophers reside in a grove in front of the city within a moderate sized enclosure. They live in a simple style and lie on pallets of straw and (deer) skins. They abstain from animal food and sexual pleasures; and occupy their time in listening to serious discourse and in imparting knowledge to willing ears. But the hearer is not permitted to speak or cough, or even to spit, otherwise he is cast out from their society that very day as being a man without self-control. After living in this manner for seven thirty years,<sup>3</sup> each individual retires to his own possessions, where he lives in security and under less restrain, wearing robes of muslin and a few of gold ornaments on his fingers and in his ears. They eat flesh, but not that of animals which assist man in his labours, and abstain from hot and highly seasoned food. They marry as many wives as they please, with a view to having many children, for from many wives greater advantages are derived. As they do not possess slaves, they need all the more to have at ready command the

2. Lassen points out (*Ind. Alt.* ii. 701) that on the contrary it was the ordinary custom, as well as a prescript of the law, that the disciple should always submit himself to but one single *guru* or preceptor, who also, during his childhood and youth, performs all the ceremonies which fall to be observed. Lassen, however, considers it beyond doubt that there must have been exceptions allowed, although we cannot now determine what these were.

3. The (Greek) writers erroneously prolong the period during which students listen to their instructors in silence and respect, making it extend in all cases to thirty seven, which is the greatest age to which Manu (chap. iii. sec. 1) permits it to be protracted. (Elphinstone's *History of India*. p. 236).

services of their children.<sup>4</sup> The Branchmanes do not communicate a knowledge of philosophy to their wives, lest they should divulge any of the forbidden mysteries to the profane, if they became depraved, or lest they should desert them if they became good philosophers; for no one who despises alike pleasure and pain, life and death, is willing to be subject to another; and this is the character both of a good man and of a good woman.<sup>5</sup> Their discourse turns most frequently on death. They regard this life as the time, so to speak, when the child within the womb becomes mature, and death as a birth into a real and happy life for those that are philosophers. On this account they undergo much discipline as a preparation for death. They consider nothing that befalls men to be either good or bad, for otherwise some persons would not be affected with sorrow and others with joy by the very same things, their notions being as inane as dreams, nor would the same persons be affected at different times with sorrow and joy by the very same things. With regard to ideas about physical phenomena, our author says that they display great simplicity, for they are better in their actions than in their reasonings, their belief being chiefly based upon fables. On many points, however, their opinions coincide with those of the Greeks, for the Brachmanes say with them that the world was created,

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4. The reason why the Brahman required children was not so much the one here alleged as the duty laid upon him to beget sons by whom the sacrifice to his manes might be performed, for, if this were omitted, his place in heaven would be lost, and he would have to be born again for the attainment of the reward of his virtue.
5. Lassen opines that the real reason was to save women from seduction.

and is liable to destruction, that it is of a spheroidal figure and that the Deity who made and governs it is diffused through all its parts. They hold that the principles of all things are different, but that water was the principle employed in the formation of the world ; that in addition to the four elements there is a fifth nature from which the heaven and the stars were produced and that the earth is situated in the centre of the universe. Concerning generation, the nature of the soul, and many other subjects, they express views similar to those of the Greeks. They wrap up their doctrines about the immortality of the soul and judgment in Hades in fables after the manner of Plato. This is the account which Megasthenes gives of the Brachmanes. (Strabo, XV. i. 59).

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### The Hylobioi :

Of the Sarmanes the most, honourable, he says, are those called the Hylobioi. They live in the forests, subsist on leaves and wild fruits, wear garments made from the bark of trees, and abstain from wine and commerce with women. They communicate with the kings who consult them by messengers regarding the causes of things, and who through them worship and supplicate the Deity. Next in honour to the Hylobioi are the physicians, for they apply philosophy to the study of the nature of man. They are frugal in their habits, but do not live in the fields. Their food consists of rice and barley meal, which every one gives who is asked, as well as every one who receives them as a guest. By their knowledge of medicine they can make persons have a numerous offspring, and make also the children to be either male or female. They effect cures rather by regulating diet than by the use of medicines.

The remedies in most repute are ointments and plasters. All others they suppose to partake largely of noxious nature. Both this class and the other class of persons practise fortitude as well by undergoing active toil as by enduring suffering, so that they will remain motionless for a whole day in one fixed posture. Besides these there are diviners and eorcerers and those who are conversant with the rites and customs relating to the dead, who go about villages and towns begging. Those who are more cultured than these and mix more with mankind, inculcate the vulgar opinions concerning Hades, which they think conducive to piety and sanctity. Women study philosophy with some of them, but they too abstain from sexual intercourse.<sup>1</sup> (Strabo, XV. i. 60).

1. This passage regarding the Buddhist ascetics is found also in Clements Alexandrinus (*Strom.* i.) He calls them correctly Sarmanai, but errs in calling the ascetics of the wood *Allobioi* instead of, like Strabo, *Hylobia*: since this word is a translation of their Sanskrit name *Vānaprastha*. Clements adds an important statement: 'Among the Indians are those philosophers who follow the precepts of Boutta, whom they honour as a god on account of his extraordinary majesty.' Colebrooke has quoted this passage from Clemens to controvert the opinion that the religion and institutions of the orthodox Hindus are more modern than the doctrines of Jina and of Buddha. It shows, he thinks, that the followers of Buddha were distinct both from the Brahmans and the Samanai - the latter, who are called by Porphyrius Samanai, being in his opinion ascetics of a different religion, and probably Jains - see his *Observations on the sect of the Jains*. Bardesames of Babylon, who wrote towards the end of the second century of our era, divides the Gymnosophists into two sects, one of which he calls Bragmanes and the other Samanai. His account of the austere life led by the latter agrees with that of Strabo. The form *Samanai* is taken from *Samana*, the Pāli for *S'ramana*.

### Brahmin sages :

Aristoboulos says that in Taxila he saw two of the sages, both Brachmanes ; the elder had his head shaved, but the other wore his hair ; both of them were followed by their disciples. Their spare time is spent in the market-place ; in respect of their being public counsellors they receive great homage, and have the privilege of taking without payment whatever they want that is offered for sale ; on every person whom they accost they pour oil of sesamum until it trickles down to their face ; of honey, which is exposed for sale in great quantity, and of sesamum they take enough wherewith to make cakes, and their food costs them nothing. They came to Alexander's table and took their meal standing, and gave an example of their endurance by retiring to a place that was near where the elder lying on his back endured the sun and the rains which were now falling, as spring had by this time set in. The other stood on one leg holding up with both his hands a beam of wood about three cubits long ; when the leg became fatigued he supported himself on the other, continued thus the whole day long.<sup>1</sup> The younger seemed to have far

1. Compare Cicero (*Tusc. Disput.* v. 27) : 'What foreign land is more vast and wild than India ? Yet in that nation first those who are reckoned sages spend their lifetime naked, and endure the snows of Caucasus and the rage of winter without grieving, and when they they have committed their body to the flames, not a groan escapes them when they are burning.' Compare also Arrian (*Indika*, c. II) 'The sages go naked, living during winter in the open air to enjoy the sunshine, and during summer, when the heat is oppressive, in meadows and low lying grounds under large trees.' Also Pliny (N. H. vii. 2) 'Their philosophers, whom they call Gymnosophists, continue standing from sunrise to sunset, gazing at the sun without winking, and standing the whole day on burning sands on one foot and then on the other.'

greater self-control, for having followed the king for a short distance he quickly turned back home. The king sent after him, but he requested the king to come to him if he wanted anything at his hands.<sup>2</sup> The other accompanied the king to the end of his days, and in staying with him dressed in a different style and altered his whole mode of life. When he was reproached by some for so doing, he answered that he had completed the forty years of asceticism which he had promised to observe.<sup>3</sup> Alexander gave presents to his children. (Strabo, XV. i. 61).

2. According to Arrian (vii. ii) however, Dandamis was the oldest of the philosophers, and the others his disciples. Strabo himself subsequently (c. 64) says that Mandanis was the oldest and wisest of the Sophists.
3. The younger, though said here to be the elder, was called by the Greeks Kalanos, but his real name, as Plutarch tells us, was Sphines. The elder was Dandamis, otherwise called Mandanes. These and other Indian philosophers, as Arrian relates (*Anab.* vii. i.) are said to have been caught by Alexander as they were walking in the open meadow, where they were in the habit of passing with their feet upon the ground. The interpreters having asking what they meant by doing this, they replied : O king Alexander! every man possesses as much of the earth as this upon which we have stepped, but you, though but a man like ourselves, only more arrogant and meddlesome, have traversed so much of the world troubling both yourself and others; and yet you must soon die and possess no more than the spot of earth which will suffice to bury you.' The Brahman ascetic was under discipline not for forty years but only till he had completed the thirty seventh year of his life. It is somewhat singular that at Rome the Vestal Virgins were bound by their vows till they had attained a similar age. Their service began when they were of any age between six and ten, and lasted for thirty years, after which they were free to return to the world and marry if they chose or were chosen.

## Conversation with sages :

Onesikritos says that he himself was sent to converse with these sages. For Alexander heard that these men went about naked, inured themselves to hardships, and were held in highest honour; that when invited they did not go to other persons, but requested such to come to them if they wished to participate in their exercises or conversations. Such being their principles, Alexander neither thought it consistent with his dignity to go to them nor cared to compel them to do anything that was contrary to their inclinations and their native customs. He therefore despatched Onesikritos to them, who relates that he found at the distance of twenty stadia from the city fifteen men standing in different postures, sitting or lying down naked, who did not move from these positions till the evening, when they returned to the city. The most difficult thing to endure was the heat of the sun, which was so violent that no one else could without pain endure to walk on the ground at midday with bare feet. (Stabo, XV. i. 63).

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He conversed with Kalanos, one of these sages, who afterwards accompanied the king to Persis, where he died after the manner of his country, amid the flames of the funeral pyre on which he had been laid. Onesikritos found him at the time of his visit lying upon stones. He approached the sage, and, having accosted him, informed him how he had been sent by the king to hear their wisdom, and to bring him a report of its nature. So then, if there was no objection, he was ready to listen to his discourse. Kalanos, observing that he wore a mantle, a broad-brimmed cap and long boots, laughed, and said: In former times the world was full of corn and barley, as it is now of dust; the fountains then flowed, some with water and others with milk, or

it might be with honey or with wine and with oil; but mankind by repletion and luxury became proud and insolent. Then Zeus, indignant at this state of things, made all disappear, and allotted to man a life of toil. When temperance, however, and other virtues had appeared once more in the world, an abundance of good things again arose. But at present the condition of satiety and wantonness was approaching, and threatened to do away with the existing state of things. Having spoken thus, he requested Onesikritos, if he wished to hear him, to strip off his clothes, and lying down naked on the same stones with himself, to listen to his discourse. While Onesikritos was hesitating what to do, Mandanis, who was the oldest and wisest of this sages, rebuked Kalanos for his insolence and for his showing that vice himself even while condemning it in others.<sup>1</sup> He then called Onesikritos to him, and said that he praised the king because though he ruled over so great an empire, he nevertheless desired wisdom, and was the only philosopher in arms that he had ever seen. It would indeed be the greatest of all benefits if those who have the power to persuade the willing and compel the unwilling to learn moderation were men of good sense. 'I am entitled', he added, 'to indulgence, if, while conversing by means of three interpreters, who, except the language, understand nothing we say any more than the vulgar, I am unable to demonstrate the utility of *philosophy*.' One might as well expect water to flow pure through mud. (Strabo, XV. i. 64).

#### The Best Doctrine :

The tendency of his discourse, he said, was this, that the best doctrine was that which removed pleasure

1. A similar account of interview will be found in Plutarch's *Life of Alexander*, c. 65.

and grief from the mind ; that grief differed from labour in that the former was an enemy and the latter a friend to man ; for men exercised their bodies with labour in order to strengthen their mental powers, by which means they would put an end to dissensions, and would unite in giving good counsel to all both to the public and to individuals. They would now unite also in advising Taxiles to receive Alexander as a friend, for if he received a person better than himself he would be benefited and if one worse than himself, he would dispose him to good. Mandanis having spoken to this effect, then enquired whether such doctrines were current among the Greeks. Onesikritos replied 'that Pythagoras taught a similar doctrine, and enjoined his disciples to abstain from animal food; and that Sokrates and Diogenes,<sup>1</sup> to whose discourses he had listened, held like opinions. Mandanis replied that in other respects he thought they entertained sound notions, but erred on one point by preferring custom to nature, for otherwise they would not be ashamed to go naked like himself and to subsist on frugal fare—for that was the best house which required least repairs.' He says also that they busy themselves with enquires concerning natural phenomena, prognostics, rains, droughts, and diseases. When they repair to the city they disperse themselves in the market place. If they happen to meet any who carries figs or bunches of grapes, they take what he bestows without giving anything in return. If he carries oil, he pours it over them, and they are anointed with it. Every wealthy house is open to them, even to the apartments of the women. On entering they share the repast and join in the conversation. It is considered most disgraceful to

1. Onesikritos was an ardent votary of the Cynic School of Philosophy founded by Diogenes.

have any bodily disease. Hence when one suspects himself to be infected he rids himself of life by means of fire, for having prepared a funeral pile and anointed himself, he settles himself upon the pyre, orders it to kindled, and remains motionless while he is burning. (Strabo, XV. i. 65).

### Brahmins as King's Counsellors :

Nearchos gives the following account of the Sages. Some of the Brachmanes take part in political life, and attend the kings as counsellors. The others are engaged in the study of nature. Kalanos belonged to the latter class. Women study philosophy along with them, and all led an austere life. With respect to the customs of the other Indians, he informs us that their laws, whether those applicable to to the community or to individuals, are not committed to writing, and are quite different from those of other nations. (Strabo, XV. i. 66).

### The S'ramanas :

The Pramnai<sup>1</sup> are philosophers opposed to the Brachmanes, and are contentious and fond of argument. They ridicule the Brachmanes who study physiology and astronomy as fools and impostors. Some of them are called the Pramnai of the mountains, others the Gymnetai, and others again the Pramnai of the city or the Pramnai of the country. Those of the mountains wear deer-skins and carry wallets filled with roots and drugs, professing to cure diseases by means of incantations, charms, and amulets. The Gymnetai, in accordance with their name, are naked, and live generally in the open air practising endurance, as I have already mentioned, for seven and thirty years. Women live in their society without sexual commerce. (Strabo, xv. i. 70).

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1. *Pramnai* should be read *Sramanai*, the Buddhist sect.

### Gymnosophists :

The Indian Theosophs, whom the Greeks call Gymnosophists, are divided into two sects, Brahmans and Shamans, Samanaeoi. The Brahmans are one family the descendants of one father and mother, and they inherit their theology as a priesthood, The Shamans, on the other hand, are taken from all Indian sects indifferently from all who wish to give themselves up to the study of divine things.<sup>1</sup> The Brahmans pay no taxes like other citizens, and are subject to no king. Of the philosophers among them, some inhabit the mountains, others the banks of the Ganges. The mountain Brahmans subsist on fruit and cow's milk, curdled with herbs. The others live on the fruit of trees which are found in plenty near the river and which afford an almost constant succession of fresh fruits, and, should these fail, on the self-sown wild rice that grows there. To eat any other food, or even to touch animal food, they hold to be the height of impiety and uncleanness. Each man has his own cabin, and lives as much as he can by himself, and spends the day and the greater part of the night in prayers and hymns to the gods. And they so dislike society, even that of one another, or much discourse, that when either happens, they expiate it by a retirement and silence of many days. They fast often. ( Bardesanes See IX ).

### Life of the Sramanas :

The Shamans, on the other hand, are, as I said, an elected body. Whoever wishes to be enrolled in their order presents himself to the city or village authorities

1. Arrian in his *Indika* writes as if the whole Brahman caste was open. He says (c. xii): 'To the philosopher alone is it permitted to be from any caste whatever for no easy life is his, but the hardest of all.'

and there makes cession of all his property. He then shaves his body, puts on the Shaman robe, and goes to the Shamans, and never turns back to speak or look at his wife and children if have any, and never thinks of them any more, but leaves his children to the king and his wife to his relations, who provide them with the necessities of life. The Shamans live outside the city, and spend the whole day in discourse upon divine things. They have houses and temples of a royal foundation and in them stewards, who receive from the king a certain allowance of food, bread and vegetables for each convent. When the convent bell rings, all strangers then in the house withdraw, and the Shamans enter and betake themselves to prayer. Prayer ended, at the sound of a second bell the servants place before each individual, for two never eat together, a dish of rice, but to any one who wants variety they give besides either vegetables or fruit. As soon as they have done dinner, and they hurry over it, they go out to their usual occupations. They are not allowed to marry or to possess property. They and the Brahmans are so honoured by the Indians, that even the king will come to them to solicit their counsel in matters of moment, and their intercession with the gods when danger threatens the country. (*ibid*).

#### **Notion of death and life after:**

Both Shamans and Brahmans have such a notion of death that they impatiently bear with life, and view it but as a necessary though burdensome service imposed upon them by nature. They hasten, therefore, to free the soul from the body. And often when a man is in good health, and no evil whatever presses upon him, he will give notice of his intention to quit the world, and his friends will not try to dissuade him from it, but rather account him happy, and give him messages for

their dead relations; so firm and true is the conviction of this people that souls after death have intercourse with one another. When he has received all his commissions, he throws himself, in order that he may quit the body in all purity, into a burning pile, and dies amid the hymns of the assembled crowd. And his nearest friends dismiss him to his death more willingly than we our fellow citizens when about to set out on some short journey. They weep over themselves that they must continue to live, and deem him happy who has thus put on immortality. And among neither of these sects, as among the Greeks, has any sophist yet appeared to perplex them by asking, "If everybody did this, what would become of the world?" (Bardesanes,<sup>1</sup> Sec. IX).

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### Order of the holy Sages :

For since in India the body politic has many divisions, one of them is the order of the holy sages, whom the Greeks are wont to call the Gymnosophists, and of whom there are two sects — Brahmans and the Samanaeans. The Brachmans form the leading sect, and

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1. It has been much disputed among scholars whether the Bardesanes who is called by Porphyry the Babylonian, and who wrote concerning the Indian Gymnosophists, was the same as the Bardesanes of Edessa (a city in the northern extremity of Mesopotamia), who wrote in Syriac against Marcion and other heretics, and was the author of a work on Fate, which was much admired for the force and splendour of its diction, which not even its translation into a foreign tongue (Greek) could quite obscure. Bardesanes the Babylonian acquired his knowledge of India from conversing with the members of an embassy from that country, sent most probably to the Emperor Marcus Aurelius Antoninus Elagabalus.

succeed by right of birth to this kind of divine wisdom as to a priesthood. The Samanaeans, on the other hand, are selected and consist of persons who have conceived a wish to devote themselves to divine wisdom. Their style of life is described as follows by Bardesanes, a Babylonian who lived in the days of our fathers, who met with those Indians who accompanied Damadamis on his embassy to the emperor. For all the Brachmans are of one race, all of them deducing their origin from one (common) father and one (common) mother. The Samanaeans, again, are not of their kindred, but are collected, as we have said, from all classes of the Indians. The Brahman is not subject to the authority of the king, and pays no tribute with others to the state. Of these philosophers some live on the mountains, and others on the banks of river Ganges. The mountain Brachmans subsist on fruits and cow milk, curdled with herbs, while the dwellers by the Ganges subsist on the fruits which grow in great plenty on the banks of that river, for the soil produces an almost constant succession of fresh fruits — nay, even much wild rice which grows spontaneously, and is used for food when there is a lack of fruit. But to taste anything else, or so much as to touch animal food, is held to be the height of impurity and impiety. They inculcate the duty of worshipping the deity with pious reverence. The whole day and greater part of the night they set apart for hymns and prayers to the gods. Each of them has a hut of his own in which he passes as much time as possible in solitude. For the Brachmans have an aversion to society and much discourse, and when either occurs, they withdraw and observe silence for many days, and they even frequently fast. The Samanaeans, on the other hand, are, as we have observed, collected from the people at large, and

when any one is to be enrolled in their order, he presents himself before the magistrates of the city or of the village to which he happens to belong, and there resigns all his possessions and his other means. The superfluous parts of his person are then shaved off, and he puts on the Samanaean robe and goes away to join the Samanaeans, taking no concern either for his wife or his children, if he has any, and thinks of them no more. The king takes charge of his children and supplies their wants, while his relatives provide for his wife. The life of the Samanaeans is on this wise. They live outside the city, and spend the whole day in discourse on divine things. Their houses and temples are founded by the king, and in them are stewards who receive a fixed allowance from the king for the support of the inmates of the convents, this consisting of rice, bread, fruits, and pot herbs.<sup>1</sup> When the convent bell rings, all strangers then in the house withdraw, and the Samanaeans entering offer up prayers. Prayer over, the bell rings a second time, whereupon the servants hand a dish to each (for two never eat out of the same vessel). The dish contains rice, but should one want a variety he is supplied with vegetables, or some kind of fruit. As soon as dinner, which is soon despatched, is over, they go out and betake themselves to their usual occupations. They are neither allowed to marry nor to possess property. They and the Brachmans are held in such high honour by the other Indians that even the king himself will visit them to solicit their prayers when the country is in danger or distress and their counsel in times of emergency.

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1. Manu says that a king, even though dying, must not receive any tax from a Brahman learned in the Vedas. The temple lands were always free from duty.

Both classes take such a view of death that they endure life unwillingly, as being a hard duty exacted by nature, and accelerate the release of their souls from their bodies; and frequently, when their health is good and no evil assails or forces them, they take their leave of life.<sup>1</sup> They let their intention to do so be known to their friends beforehand, but no one offers to prevent them; on the contrary, all deem them happy, and charge them messages to their dead relatives, so firm and true is the belief in their own minds, and in the minds of many others, that souls after death have intercourse with each other. When they have heard the commissions entrusted to them they commit their body to the flames with a view to sever the soul from the body in completest purity, and then they die amid hymns resounding their praises, for their most attached friends dismiss them to death with less reluctance than it gives us to part with our fellow citizens who set out on a distant journey. They weep, but it is for themselves, because they must continue to live, and those whose death they have witnessed they deem happy in their attainment of immortality. And neither among those Samanaeans nor among the Brachmans whom I have already mentioned, has any sophist come forward, as have so many among the Greeks, to perplex with doubts by asking where

1. Frequent references to this characteristic of the Indian philosophers are made by the classical writers, Pomponius Mela (III vii. 40) thus writes: 'But when old age or disease affects them they go far away from others, and await death... without any anxiety... Those that are wiser... do not await its coming, but for the sake of the glory to accrue gladly invite it by casting themselves into a burning pyre.' Suicide except for sickness is not approved by Manu. Reinaud was of opinion that the practice was due to the belief in the metempsychosis.

would we be if every one should copy their example.  
(Porphyrios, Sec. IX)<sup>2</sup>

### S'iva as Ardhanārīs'vara :

The Indians, then, have this lake for the trial of voluntary offences, and they have another beside for the voluntary and involuntary alike — in fact, for the trial of a man's whole life. Bardisanes gives this account of it, which I transcribe in his own words : They (the Indian ambassadors) told me further that there was a large natural cave in a very high mountain almost in the middle of the country,<sup>1</sup> wherein there is to be seen a statue of

2. The work of Bardesanes on the Indian Gymnosophists is lost, but an extract of considerable length has been preserved by Porphyry in the Fourth book of his treatise On 'Abstinence From Animal Food. (*περιπανοχῆς τῶν εμψυχῶν*) Prophyry, who himself a Tyrian, but was probably a native of Batanea or Bashan, was a man of great ability and learning, and became famous as an opponent of Christianity, and as a capable exp̄sitor of the doctrines of Neo Platonism, which he had learned in Rome from Plotinus, the originator of that philosophical system. In his writings he inculcates a severe morality and the subjugation of our passions by ascetic practices. Hence we need not be surprised to find him regarding with sympathetic admiration the austerities of the Indian Gymnosophists. Porphyry was born in the year A. D. 233, and died in 305 or 306.
1. The part of India from which this embassy came may be inferred from the name borne by the chief who conducted it, namely Sandanes, as well as by his mention of the Rock-temple. Temples of this kind abound in the Maratha country, especially in the maritime district which in Ptolemy is called *Ariake Sadinon*, that is the division of Ariake ruled by the Sadaneis, or Sandaneis, or Sandaneis as they are called in the *Periplus*. This district was in these days the seat of an

of ten, say, or twelve cubits high, standing upright with its hands folded crosswise and the right half of its face was that of a man, and the left that of a woman; and in like manner the right hand and right foot, and in short the whole right side was male and the left female, so that the spectator was struck with wonder at the combination, as he saw how the two dissimilar sides coalesced in an indissoluble union in a single body.<sup>2</sup> In this statue was engraved, it is said, on the right breast the sun, and on the left the moon, while on the two arms was artistically engraved a host of angels<sup>3</sup> and whatever the world contains, that is to say, the sky and mountains and a sea, and a river and ocean, together with plants and animals — in facts, everything.<sup>4</sup> The Indians allege that the deity had given this statue to his son when he founded the world as a visible representation thereof. And I inquired, adds Bardesanes, of what material this statue was made, when Sandales assured me, and the others confirmed his words, that no man could tell what the material was, for it was neither gold, nor silver, nor brass, nor stone, nor indeed any known substance, but that though not wood it most resembled a very hard wood, quite free from rot.<sup>5</sup> And they told how one of their kings had tried to pluck out

active and extensive commerce, in the interest of which, it is safe to conclude, the embassy to the Roman Emperor was undertaken.

2. This is Śiva as Ardhanārīsa, half man, half woman. Such figures are to be found in the Rock temples and on Skythian coins.
3. Bardesanes thus translates the Indian word *deva*, 'gods of secondary rank.'
4. The statue thus represented Śiva as the Supreme God — the Creator of the world.
5. Lassen thinks the statue was made of teakwood.

one of the hairs about its neck, and how blood flowed out, whereat the king was so struck down with terror that, even with all the prayers of the Brahmans, he hardly recovered his senses.<sup>6</sup> They said that on its head was the image of a god, seated as on a throne and that in the great heats the statue ran all over with sweat, so copiously discharged that it would have moistened the ground at the base, did not the Branchmans use their fans to stop the flux.<sup>7</sup> Farther on in the cave a long way behind the statue, all, the Indians say, was dark, and those wish to go in advance with lighted torches till they come to a door from which water issues and forms a lake around the far end of the cave. Through this door those must pass who desire to prove themselves. Those who have lived unstained with vice pass through without impediment, the door opening wide to them, and find within a large fountain of water clear as crystal and of sweetest taste—the source of the stream spoken of. The guilty, however, struggle hard to push in through that door, but fail in the attempt, for it closes against them. They are thus compelled to confess their offences against others, and to entreat the rest to pray for them. They also fast for a considerable time.

Sandanes further stated that himself and his companions found the Brachmans on an appointed day assembled together in this place, that some of them spent their life there, but that others come in the summer and autumn when fruit is plentiful both to see

6. The Brahmans probably invented this and such like stories to deter people from too closely examining the images of the gods, inside of which for safe custody they concealed their treasures.

7. An image, Lassen thinks, of the River Ganges.

the statue and meet their friends, as well as to prove themselves whether they could pass through the door. At the same time, it is said, they examine the sculptures on the statue and try to discover their meaning, for it is not easy to attend to the whole representation, the objects being so numerous, while some of the plants and animals are not to be found in any part of the country. Such then is the account which the Indians give of the ordeal by water. It is, I think, of this water in the cave that Apollonios of Tyana makes mention for when writing to the Brachmans he swears this oath: 'No, by the water of Tantalus, you shall not initiate me into your mysteries; for, it seems to me, he speaks of this water of Tantalus because it punishes with the disappointment of their hopes those who come eagerly to it, and try to drink of it. (Johannes Stobaios, Sec. IX).

#### The fountain of truth :

But though India is actually in the enjoyment of all these blessings, there are nevertheless men called Brahmans, who, bidding adieu to the rivers and turning away from those with whom they had been thrown in contact live apart, absorbed in philosophic contemplation, subjecting their bodies to sufferings of astonishing severity, though no one compels them, and submitting to terrible endurances. It is said, further, that they possess a remarkable fountain — that of truth — by far the best and most divine of all — and that any one who has once tasted it can never be satiated or filled with it.<sup>1</sup> (Dion Chrysostom Section IX).

1. Dion., surnamed Chrysostom or the golden mouthed, on account of his shining abilities as an orator, was born at Prusa, a city of Mysia, about the middle of the first Christian century. He found occupation at first in his native place, where he

### Life of the Brahmanas :

We then, prompted by our regard for you, in addition to what we have already related, will further give you a description of the life of the Brahmans, whose country I have neither visited, nor met with any of its people; for they live far remote, dwelling near the Ganges, the river of India and Serica. But I merely reached the Akroteria of India a few years ago with the blessed Moses, the Bishop of Adule, for, being distressed by the heat, which was so fierce that water which on gushing from its fountain was excessively cold began to boil when put into a vessel, I turned back when I noticed this, as I found no shelter from the burning heat. (Pseudo-Kallisthenes Book III. vii).

The traveller stated that the Brachman nation was not an order like that of the monks, which one could

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hold important offices, practised the composition of speeches and rhetorical essays, and studied philosophy, with a view to apply its doctrines to the purposes of practical life — more especially to the administration of public affairs. Having somehow incurred the suspicion and enmity of his fellow citizens he removed to Rome. Domitian, who hated philosophers, was then reigning, and by a decree of the senate expelled them all from Rome and the rest of Italy. Dion, then, attired as a beggar, visited Thrace, Mysia, Skythia, and the country of the Getae. The people, wheresoever he went, were so charmed with his oratory, that they never failed to show him much kindness. After the murder of Domitian, he returned to Rome, where he enjoyed the esteem and friendship of the Emperors Nerva and his successor Trajan, and where also he died (A. D. 117) Eighty of his Orations are still extant, and these sufficiently justify the opinion of the ancients, that Dion is one of the most eminent among the Greek rhetoricians and sophists. His style is praised for its Attic purity and grace.

enter if he chose — but a society, admission into which was allotted from above by the decrees of God. They live in a state of nature near the river, and go about naked. They have no quadrupeds, no tillage, no iron, no house, no fire, no bread, no wine, no implement of labour, nothing tending to pleasure. The air they breathe is at once bracing and temperate, and altogether most delightful. They reverence the Deity, and are not so scant of wit as to be unable to discern aright the principles of divine Providence. They pray without ceasing, and, while so engaged—instead of looking towards the East, they direct their eyes steadfastly towards heaven without averting their gaze to the East. They subsist on such fruits as chance offers, and on wild lupines that grow spontaneously. They drink water as they roam about the woods, and they take their repose on the leaves of trees. (Book III. ix ).

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The Brachmans neither eat anything having life nor drink wine, but some of them every day, like ourselves take food, while others of them do so once in three days, as Alexander Polyhistor relates in his *Indika*.<sup>1</sup> They despise death, and set no value on life; for they are persuaded that there is a new birth, (παλιγγενεια) and these worship Herakles and Pan.<sup>2</sup> But

1. Alexander Cornelius, surnamed Polyhistor on account of his immense learning, was a native of Ephesus, who was made prisoner during the war of Sulla in Greece, and sold as a slave to Cornelius Lentulus, by whom he was taken to Rome. He wrote numerous works, of which the most important was one in forty-two books, which contained historical and geographical accounts of the countries of the ancient world. Pliny often quotes this last work.
2. Pan may be identified with Vishnu, and Hercules with Krishna.

those Indians who are called Semnoi<sup>3</sup> go naked all their lives. These practise truth, make predictions about futurity, and worship a kind of pyramid beneath which they think the bones of some divinity lie buried.<sup>4</sup> But neither the Gymnosophists nor the Semnoi use women, for they regard this as contrary to nature and unlawful; for which reason they keep themselves chaste. The Semnai, too, remain virgin. They observe closely the heavenly bodies, and, by the indications of futurity which these offer, make some predictions. (Clemens Alexandrinus. *Stromateis* III. 194).

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### Sophists respected by Kings :

Bardesanes, a Babylonian, divides the Indian Gymnosophists into two sects, one of which he calls Brachmans and the other Samanaeans, who are so abstemious that they subsit on the fruits of trees or a public allowance of rice or flour. And the king on coming to them worships them, and the peace of his dominions depends according to his judgment on their prayers. (St. Jerome *II. Adv. Jovin.* 14.)

### Brahmins as Sun worshippers :

Hierokles — from Stephanos of Byzantium, s. v. the Brachmanes — After this I thought it worth my while to

3. Clemens in another passage calls the Northern Buddhists *Samanoeoī*, a name which first occurs in Polyhistor. In yet another passage he says that the Indian philosophers are of two kinds — the Sarmanai and the Brachmanai. Here he follows Megasthenes. The former name represents the Sanskrit *Sramana*, 'a Buddhist ascetic.' Semnoi, 'holy men', both in sound and sense represent the form Samanai-oi.
4. These pyramidal structures are called *topes* or *stupas*.

go and visit the Brahman caste. These men are philosophers dear to the gods and especially devoted to the sun. They abstain from all flesh meats and live out in the open air, and honour truth. Their dress is made of the soft and skin-like ( $\delta\epsilon\rho\mu\sigma\tau\omega\delta\eta$ ) fibres of stones, which they weave into a stuff that no fire burns or water cleanses. When their clothes get soiled or dirty, they are thrown into a blazing fire, and come out quite white and bright Priaulx's *Trans.* (Hierokles, Sec. X).

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### Observance of rules by Indian Philosophers :

Speaking of the philosophers, he (Megasthenes) says that such of them as live on the mountains are worshippers of Dionysos, showing as proofs that *he had come among them* the wild vine, which grows in their country only, and the ivy, and the laurel, and the myrtle, and the box-tree, and other evergreens, none of which are found beyond the Euphrates, except a few in parks, which it requires great care to preserve. They observe also certain customs which are Bacchanalian. Thus they dress in muslin, wear the turban, use perfumes, array themselves in garments dyed of bright colours; and their kings, when they appear in public, are preceded by the music of drums and gongs. But the philosophers who live on the plains worship Herakles. (These accounts are fabulous, and are impugned by many writers, especially what is said about the vine and wine. For the greater part of Armenia, and the whole of Mesopotamia and Media, onwards to Persia and Karmania, lie beyond the Euphrates, and throughout a great part of each of these countries good vines grow, and good wine is produced.) (Strabo, XV. i. 58 Meg. Frag. XLI).

## Philosophers — abstinence from Vices :

Megasthenes makes a different division of the philosophers, saying that they are of two kinds — one of which he calls the Brachmanes and the other the Sarmanes.<sup>1</sup> The Brachmanes are best esteemed, for they are more consistent in their opinions. From the time of their conception in the womb they are under the guardian care of learned men, who go the mother and, under the pretence of using some incantations for the welfare of herself and her unborn babe, in reality give her prudent hints and counsels. The women who listen most willingly are thought to be the most fortunate in their children. After their birth the children are under the care of one person after another, and as they advance in age each succeeding master is more accomplished than his predecessor. The philosophers have their abode in a grove in front of the city within a moderate sized enclosure. They live in a simple style, and lie on beds of rashes or (deer) skins. They abstain

1. Since the word *Σαρμανες* (the form used by Clemens of Alexandria) corresponds to the letter with the Sanskrit word *Śramaya* (i. e. an ascetic), it is evident that the forms *Γαρμανες* and *Γερμανες* which are found in all the MSS of Strabo, are incorrect. The mistake need not surprise us, since the *ΣΑ* when closely written together differ little in form from the syllable *ΓΑ*. In the same way Clement's *Ἄλλοβοι* must be changed into Strabo's *Υλλοβοι* corresponding with the Sanskrit *Vānaprastha* — 'the man of the first three castes who, after the term of his householdership has expired, has entered the third *āśrama* or order, and has proceeded (*prastha*) to a life in the woods (*Vana*)' — Schwanbeck, p. 46; H. H. Wilson, *Gloss.* 'It is a capital question', he adds 'who the Sarmanae were, some considering them to be Buddhists, and others denying them to be such. Weighty arguments are adduced on both sides, but the opinion of those seems to approach nearer the truth who contend that they were Buddhists.'

from animal food and sexual pleasures, and spend their time in listening to serious discourse, and imparting their knowledge to such as will listen to them. The hearer is not allowed to speak, or even to cough, and much less to spit, and if he offends in any of these ways he is cast out from their society that very day, as being a man who is wanting in self-restraint. After living in this manner for seven and thirty years, each individual retires to his own property, where he lives for the rest of his days in ease and security.<sup>2</sup> They then array themselves in fine muslin and wear a few trinkets of gold on their fingers and in their ears. They eat flesh, but not that of animals employed in labour. They abstain from hot and highly seasoned food. They marry as many wives as they please, with a view to have numerous children, for by having many wives greater advantages are enjoyed, and since they have no slaves, they have more need to have children around them to attend to their wants. (ibid; Strabo XV i. 59).

#### Philosophy not communicated to women :

The Brachmanes do not communicate a knowledge of philosophy to their wives, lest they should divulge any of the forbidden mysteries to the profane if they

2. 'A mistake (of the Greek writers) originates in their ignorance of the fourfold division of a Brahman's life. Thus they speak of men who had been for many years sophists marrying and returning to common life (alluding probably to a student who having completed the austerities of the first period, becomes a householder).' Elphinstone's '*History of India*', p. 236, where it is also remarked that the writers erroneously prolong the period during which students listen to their instructors in silence and respect, making it extend in all cases to thirty seven, which is the greatest age to which Manu (Chap. III. Sec. 1) permits it in any caste to be protracted.

became depraved, or lest they should desert them if they became good philosophers; for no one who despises pleasure and pain, as well as life and death, wishes to be in subjection to another, but this is characteristic both of a good man and of a good woman.

Death is with them a very frequent subject of discourse. They regard this life as, so to speak, the time when the child within the womb becomes mature, and death as a birth into a real and happy life for the votaries of philosophy. On this account they undergo much discipline as a preparation for death. They consider nothing that befalls men to be either good or bad, to suppose otherwise being a dream like illusion, else how could the same things affect the same individuals at different times with these opposite emotions?

#### The five elements:

Their ideas about physical phenomena, the same author tells us, are very crude, for they are better in their actions than in their reasonings, in as much as their belief is in great measure based upon fables; yet on many points their opinions coincide with those of the Greeks, for like them they say that the world had a beginning, and is liable to destruction, and is in shape spherical, and that the Deity who made it, and who governs it, is diffused through all its parts. They hold that various first principles operate in the universe, and that water was the principle employed in the making of the world. In addition to the four elements there is a fifth agency, from which the heaven and the stars were produced.<sup>1</sup> The earth is placed in the centre of the universe. Concerning generation, and the nature of the soul, and many other subjects, they express views like those maintained by the Greeks. They wrap up

1. Ākāśa, 'the ether or sky.'

their doctrines about immortality and future judgment, and kindred topics, in allegories, after the manner of Plato. Such are his statements regarding the Brachmans. (Meg. Frag. XLI; Strabo, XV. i. 59 ).

### Hylobioi greatly honoured :

Of the Sarmanes<sup>1</sup> he tells us that those who are held in most honour are called the Hylobioi.<sup>2</sup> They live in the woods, where they subsist on leaves of trees and wild fruits, and wear garments made from the bark of trees. They abstain from sexual intercourse and from wine. They communicate with the kings, who consult them by messengers regarding the causes of things, and who through them worship and supplicate the deity. Next in honour to the Hylobioi are the physicians, since they are engaged in the study of the nature of man. They are simple in their habits, but do not live in the fields. Their food consists of rice and barley meal, which they can always get for the mere asking, or receive from those who entertain them as guests in their houses. By their knowledge of

1. Schwanbeck argues from the distinct separation here made between the Brachmanes and the Sarmanes, as well as from the name *Sramana* being especially applied to Baudha teachers, that the latter are here meant. They are called *Σαμαναῖς* by Bardesanes (ap. Porphy. *Abstin.* IV. 17) and Alex. Polyhistor. (ap. *Cyrill contra Julian.* IV. p. 133 E, ed. Paris, 1638). Conf. also Hieronym *ad Jovinian.* II. (ed. Paris, 1706, T. II. pt. II. p. 206). And this is just the Pali name *Sammanā*, the equivalent of the Sanskrit *Sramana* Bohlen in *De Buddhaismi origine et aetate definiendis* sustains this view, but Lassen (*Rhein. Mus. fur Phil.* I. 171. ff.) contends that the description agrees better with the Brähman asetics. See Schwanbeck, p. 45ff. and Lassen, *Ind. Alterth.* (2nd ed.) II. 705, or (1st ed.), II. 700.

2. See note \* page 93.

pharmacy they can make marriages fruitful, and determine the sex of the offspring. They effect cures rather by regulating diet than by the use medicines. The remedies most esteemed are ointments and plasters. All others they consider to be in great measure pernicious in their nature.<sup>3</sup> This class and the other class practise fortitude, both by undergoing active toil, and by the endurance of pain, so that they remain for a whole day motionless in one fixed attitude.<sup>4</sup>

### Diviners and Sorcerers :

Besides these there are diviners and sorcerers and adepts in the rites and customs relating to the dead, who go about begging both in villages and towns.

Even such of them as are of superior culture and refinement inculcate such superstitions regarding Hades as they consider favourable to piety and holiness of life. Women pursue philosophy with some of them, but abstain from sexual intercourse. (Meg. Frag. XLI; Strabo XV, 1-60).

### Many nations of Indians :

There are many nations of Indians, and they do not speak the same language as each other; some of them are nomades, and others not. Some inhabit the marshes of the river and feed on raw fish, which they take going out in boats made of reeds; one joint of the

3. "The habits of the physicians", Elphinstone remarks, "seem to correspond with those of Brahmans of the fourth stage."

4. "It is indeed", says the same authority, "a remarkable circumstance that the religion of Buddha should never have been expressly noticed by the Greek authors, though it had existed for two centuries before Alexander. The only explanation is that the appearance and manners of its followers were not so peculiar as to enable a foreigner to distinguish them from the mass of the people."

reed makes a boat. These Indians wear a garment made of rushes, which, when they have cut the reed from the river and beaten it, they afterwards plait like a mat and wear it like a corselet. (Hero. Sec. I, Book III-98).

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### The Nomads :

Other Indians, living to the east of these, are nomades and eat raw flesh; they are called Padaeans. They are said to use the following customs. When any one of the community is sick, whether it be a woman or a man, if it be a man the men who are his nearest connections put him to death, alleging that if he wasted by disease his flesh would be spoilt; but if he denies that he is sick, they, not agreeing with him, kill and feast upon him. And if a woman be sick, in like manner the women who are most intimate with her do the same as the men. And whoever reaches to old age, they sacrifice and feast upon; but few among them attain to this state for before that, they put to death every one that falls into any distemper.<sup>1</sup> (Hero. Book III-99).

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### Indian customs :

Other Indians have the following different custom they neither kill anything that has life, nor sow anything, nor are they wont to have houses, but they live upon herbs, and they have a grain the size of millet in a pod which springs spontaneously from the earth, this they gather, and boil it and eat it with the pod. When any

1. This revolting practice did not exist among the Aryan Indians, but may have prevailed among barbarous tribes on the borders of India Proper. We learn from Duncker that the practice still prevails among the aboriginal races inhabiting the Upper Nerbudda among the recesses of the Vindhya. The Padaeans are mentioned by Tibullus, iv. i. 144.

one of them falls into any disorder, he goes and lies down in the desert, and no one takes any thought about him, whether dead or sick. (Hero. Book III. 100).

### Beauty and its importance to Indians:

A very singular thing is noticed by the historians about beauty, that in Kathaia an uncommon value is attached to this quality as much when possessed by men as by horses and dogs, for Onesikritos tells us that the handsomest man is chosen as king,<sup>1</sup> and that a child two months after its birth is subjected to examination by public authority to determine whether it has the beauty of form prescribed by law and whether it deserves to live or not. The presiding magistrate, on concluding the examination, pronounces whether it is to be permitted to live or must be put to death.<sup>2</sup> By way of embellishing their persons, they dye their beards with a great variety of the most florid hues. This custom prevails elsewhere among many of the Indians, who bestow great attention on dyeing both their hair and their garments with the colours surprising beauty which their country produces. The people in other respects are frugal but are fond of ornament. A peculiar custom is mentioned

1. Strabo here in effect says that the Kathaians chose their king on the principle which determines our choice of a dog or a horse—their superior beauty—but Falconer misses this point by translating the passage thus: ‘A very singular usage is related of the high estimation in which the Kathaians hold the quality of beauty *which they extend to horses and dogs*. Strabo’s remark is applicable to the subjects of Sophytes rather than to their neighbours, the Kathaians, whose institutions were republican.
2. The same account of the practice of infanticide is given by Diodoros xvii, 91, and by Q. Curtius ix. 2. These authors, however, state that the practice prevailed in the kingdom of Sopeithes.

as existing among the Kathaians—that the husband and wife choose each other, and that the wives burn themselves along with their deceased husbands. The reason for this practice is that the wives would sometimes fall in love with young men, and desert their husbands or poison them. This law was therefore instituted with a view to suppress the practice of administering poison. But it is probable that the law never existed nor the circumstances to which its origin is ascribed. (Strabo, XV. i. 30).

### Indian's longevity:

He expatiates in praises of the country of Mousikanos,<sup>1</sup> and notices those characteristics which its inhabitants share with other Indians, that they are long lived and that the term of life extends to 130 years (the Seres, however, according to some writers, are still longer lived<sup>2</sup>) that they live sparingly and are healthy,

1. The country of Mousikanos must have corresponded more or less closely with what was known subsequently as the kingdom of Upper Sindh, of which the capital was for many ages Alor. The country was described to Alexander as the richest and most populous in all India. The inundations of the Indus made an Eden of all the lands they overspread.
2. The Seres were only known in Strabo's time as a people of the far east, from whose country silk was brought to the nations of the west. The first mention of their name in any classical work is to be found in the *Indika* of Ktesias. Virgil, *Georg.* ii. 121, refers to their silk as a tree product:-

‘Velleraque ut soliis depectant tenuia Seres’. Longevity was ascribed to the Hyperboreans of India, the Uttarakuru, and also, as we learn from Ktesias, to the Kynoskephalai—a dog-headed race with tails. The Greeks after the expedition of Alexander became acquainted with the fictions of Brahmanic poetry as well as with a good many other stories which made them look upon India as a land of prodigies.

even though their country produces everything in abundance. The following customs, however, are peculiar to them: to have a common meal which they eat in public as did the Lacedemonians, their food consisting of the produce of the chase; to use neither gold nor silver though they have mines of these metals; to employ instead of slaves young men in the flower of their age, as the Cretans employ the Aphamiotai,<sup>3</sup> and the Lacedemonians the Helots; to study no science with attention except that of medicine, for they regard the excessive pursuit of any art, as war for instance and the like, as wickedness; to have no actions at law but for murder and outrage, for to escape these evils does not lie in one's own power, but it is otherwise in the case of contracts where each one can protect his own interests, so that if one of the parties violates his faith, the other must endure the wrong, for a man must be cautious whom he trusts, and not engross the attention of the city with his lawsuits. Such are the accounts given by men who accompanied Alexander in his expedition. (Strabo, XV. i. 34).

#### Indian's life-simple and contended:

The Indians all live frugally, especially when in camp. They care not to congregate in large unruly masses, and they consequently observe good order. Theft is a thing of very rare occurrence. Megasthenes, who was in the camp of Sandrokottos which consisted of 400,000 men, says he found that the thefts reported on any one day did not exceed the value of 200 drachmai<sup>1</sup>,

3. The Aphamiotai were, like the Helots, serfs, *ascripti gleboe*. Their name is said to be from *aphamia*, 'an allotment of land.' They are mentioned also by Athenaios.

1. The *drachma* was a silver coin nearly equal in value to the Roman *denarius* or a franc - 9½ d.

and this among a people who have no written laws, but are ignorant of writing, and conduct all matters by memory.<sup>9</sup> They lead nevertheless happy lives, being

2. Megasthenes could not possibly have been ignorant of the fact that the art of writing was known to the Indians. What he said must have been that of Indians in their judiciary transactions did not employ written laws because the judges knew the laws by heart. That the art of writing was known in India at the time of the Macedonian Invasion is evident from the statement which our author (c. 67) quotes from Nearchos : 'The Indians write letters upon cloth very closely woven. How long the Cadmus of India preceded the invasion has not yet been determined. In an article contributed to the *Journal of the Royal Asiatic Society* (vol. xiii, pt. ii., n. s. p. 208), Mr. J. H. Nelson endeavours to prove that in ancient times, law, considered as an aggregate of rules of conduct which courts of justice of whatever kind habitually recognise and enforce, never was administered to Hindus by Hindus or others. With regard to the works commonly supposed to contain the Law of the Hindus, he remarks that 'from the time of Megasthenes to that of Sir William Jones, few persons, if any, appear to have noticed their existence. The observant Greek envoy, who lived for years at the court of Chandragupta, and wrote the earliest and most valuable description of the Indians that has come down to us from ancient times cannot have seen or heard of the 'Laws of Manu.' Not only does he expressly say that the Indians 'use unwritten laws', he also describes a state of things wholly inconsistent with the idea that justice was administered to the people by judges in accordance with the provisions of written laws like those attributed to Manu.' Mr. Nelson then proceeds to show from passages extracted from Strabo and Arrian what the state of things was of which Megasthenes had given a description, and then adds : 'When we consider these matters, and what Megasthenes tells us of the people's habits in respect to eating and drinking, and of the king's guard of Amazons, and particularly the fact that the writer divides the people, not into

simple in their manners and frugal. They never drink wine except at sacrifices. Their beverage is prepared from rice instead of barley, and their food is principally a rice pottage. The simplicity of their laws and their contracts appears from the fact that they seldom go to law. They have no suits about pledges or deposits, nor do they require either seals or witnesses, but make their deposits and confide in one another. Their houses and property are for the most part unguarded. These things show their moderation and good sense, but other things they do which one cannot approve—that they always eat alone, and that they have no fixed hours when all take their meals in common, but each one eats when it pleases himself. The contrary custom would be better for the interests of social and political life. (Strabo, XV. i. 53).

#### Indian's love for finery and ornamnetation :

Their favourite mode of exercising the body is by friction in various ways, but especially by passing smooth ebony rollers over the surface of the body.<sup>1</sup> Their tombs are plain, and the mounds raised over the dead,

the four classes of Manu, but into seven classes quite different from those four, it becomes very difficult, it seems to me, to believe that the Code of Manu gives a picture even proximately correct of the state of Indian society in the fourth century before Christ. Still less can we believe that it contains the laws then observed by that society. Nearchos confirms Megasthenes statement to the effect that the Indians had no written laws, whilst he knew that they possessed the art of writing. Next we come to the Chinese pilgrims Fah Hian and Hicuen Thsarg, of the fifth and seventh centuries of our era respectively.<sup>2</sup> Of these Mr. Nelson says that they appeared to know nothing of the existence among the Hindus of written laws.

1. Lassen remarks that this account is in strict accordance with truth. In the Epic poems the practice is mentioned, and in

lowly.<sup>2</sup> In contrast to the simplicity they observe in other matters, they love finery and ornament. They wear dresses worked in gold, and adorned with precious stones, and also flowered robes made of fine muslin. Attendants follow them with umbrellas; for they hold beauty in high esteem and resort to any device which helps to improve their looks.<sup>3</sup> They respect alike truth and virtue. Hence they assign no special privilege to the old unless they possess superior wisdom. They marry many wives<sup>4</sup>, whom they purchase from their

those dramas in which daily life is most accurately represented there appears among the servants of a man of quality a shampooer (*samtāhaka*) whose duty it was to rub and press the joints and limb of his master. In the *Rāmāyana* this function is assigned to women. They are still adepts in the art.

2. Compare what Arrian says (*Indika*, c. 10): 'It is said that the Indians do not rear monuments to the dead, but consider the virtues which men have displayed in life, and the songs in which their praises are celebrated sufficient to preserve their memory after death.'
3. Compare the account given by Q. Curtius (ix. i.) of the dress in which King Sopithes (Sophytes) had arrayed himself when he came forth from his capital to meet Alexander the Great: 'His royal robe which flowed down to his very feet was all inwrought with gold and purple. His sandals were of gold and studded with precious stones, and even his arms and wrists were curiously adorned with pearls. At his ears he wore pendants of precious stones which from their lustre and magnitude were of inestimable value. His sceptre, too, was made of gold and set with beryls.'
4. The number of wives an Indian might have depended upon the caste to which he belonged. A Brahman was permitted by Manu to have four or three, a warrior three or two, a Vaisya two or one, and a Sudra one only. The two upper castes seldom stretched their prerogative to its limit. The kings, however, did so.

parents, giving in exchange a yoke of oxen. Some they marry, hoping to find in them obedient attendants, and others for pleasure and to fill their houses with children.<sup>5</sup> The wives prostitute themselves unless their chastity is enforced by compulsion. Not one is crowned with a garland when sacrificing, or burning incense, or pouring out a libation. They do not stab the victim, but strangle it, so that nothing mutilated, but only what is entire may be offered to the deity. A person convicted of bearing false witness suffers a mutilation of his extremities. He who maims another not only suffers in return the loss of the like limb, but his hand also is cut off. If he causes a workman to lose his hand or his eye, he is put to death. The same writer says that none of the Indians employ slaves. Onesikritos, however, says that the custom was peculiar to the people in the country of Mousikanos. He speaks of this as a right thing and mentions with like approbation many other things to be found in this country, resulting from the excellent laws by which it is governed. (Strabo, XV. i. 54).

### Life in the Royal Palace :

The care of the king's person is entrusted to women, who also are bought from their parents.<sup>1</sup> The body-

5. One of the main reasons is omitted—the duty incumbent on every Indian of begetting a son to perform the sacrifice to his ancestors. That form of marriage by which presents were given to the parents of the bride was only one of many and one moreover that was seldom observed. See Lassen. *Ind. Alt.* ii. 725.

1. From Curtius we learn that the food eaten by the king was prepared by women. Women also, he adds, served him with wine, and, when he fell into a drunken sleep, carried him away to his bedchamber, while invoking the gods of the night in their native hymns. (viii. 9).

guards and the rest of the soldiery are posted outside the gates. A woman who kills a king when drunk is rewarded by becoming the wife of his successor. The sons succeed the father. The king may not sleep during the day time, and at night he is obliged to change his couch from time to time to defeat plots against his life. The king leaves his palace not only in time of war, but when he has to sit in court to try cases. He remains there for the whole day without allowing the business to be interrupted, even though the time arrives for attending to his person. This attention consists in the friction of his person with cylinders of wood. He continues hearing cases while the friction, which is performed by four attendants, is still proceeding.<sup>2</sup> Another purpose for which he leaves his palace is to offer sacrifice; a third is to go to the chase, and this in sort of bacchanalian fashion. Crowds of women surround him, and on the outside are spearmen. The road is marked with ropes, and it is death for a man or even for a woman to pass within the ropes. Men with drums and gongs lead the procession. The king hunts in the enclosures and shoots arrows from a platform. At his side stand two or three armed women. If he hunts in the open grounds, he shoots from the back of an elephant. Of the women, some ride in chariots, some on horses, and some even on elephants, and they are equipped with all sorts of weapons, as if they were going on a military expedition (Strabo, XV. i. 55).

2. Curtius represents the king as so engaged *within* the palace: 'The palace,' he says (viii. 9), 'is open to all comers, even when the king is having his hair combed and dressed. It is then that he gives audience to ambassadors and administers justice to his subjects. His slippers are after this taken off and his feet are rubbed with scented ointments.'

### Strange and unusual customs in Taxila :

He makes mention of some strange and unusual customs which existed at Taxila. Those who are unable from poverty to bestow their daughters in marriage, expose them for sale in the market place in the flower of their age, a crowd being assembled by sound of the shells and drums, which are also used for sounding the war note. When any person steps forward, first the back of the girl as far as the shoulders is uncovered for his examination, and then the parts in front, and if she pleases him and allows herself at the same time to be prsuaded they cohabit on such terms as may be agreed upon.<sup>1</sup> The dead are thrown out to be devoured by vultures. The custom of having many wives prevails here, and is common among other races. He says that he had heard from some persons of wives burning themselves along with their deceased husbands and doing so gladly; and that those women who refused to burn themselves were held in disgrace. The same things have been stated by other writers.<sup>2</sup> (Strabo XV. i. 62),

1. Curtius (ix. i.) states that the subjects of Sopithes (Sophytes when the name is properly transliterated) in contracting marriages are indifferent to an alliance with high birth, but choose a wife on account of her good looks. Diodoros writes to the same effect: 'In selecting a bride they care nothing whether she has a dowry, but look only to her beauty and other advantages of the outward person.' (xvii. 91).
2. Diodoros says (xvii. 91) that among the Kathaians it was the custom for widows to be burned along with their husbands. He has pointed out, however, (xix. 33) that an exception was made for women with child or with a family. Otherwise, if she did not comply with this custom she was compelled to remain a widow for the rest of her life, and to take no part in sacrifices or other rites, as being an impious person.

### Customs of other Indians :

With respect to the customs of the other Indians, he informs us that their laws, whether those applicable to the community or to individuals, are not committed to writing,<sup>1</sup> and are quite different from those of other nations. For example, among some tribes it is the custom to offer virgins as a prize to the victor in a boxing match, so that they may be married though portionless.<sup>2</sup> (Strabo, XV. i. 66).

### Method of salutation :

In the accounts of India, the following custom is also mentioned, that instead of prostrating themselves before their kings and all persons of high rank and authority, it is usual to address them with prayers. (Strabo, XV. i. 67).

Cicero in his *Tusculan Disputations* (v. 27) refers to this practice in these terms: 'Women in India, when the husband of any of them dies, dispute and try in court which of them he loved best, for several of them are married to one man. She who comes off victorious joyfully amidst her friends and relatives is placed along with her husband on his funeral pile. The widow who has been unsuccessful departs full of sorrow.'

1. See note p. 74, No. 2, where Nelson is quoted.
2. There may be here a reference to the ancient custom called *Seayamvara*, i. e. the election of a husband by a princess or daughter of a Kshatriya at a public assembly of suitors held for the purpose. The great Rama, according to the well known story, obtained Sita for his wife, because that he alone of all the princes assembled at Mithila as suitors for her hand was able to bend the bow of Siva. Arrian (*Indika*, c. 17) says that women when marriageable are exposed by their fathers in public, and are selected by those who have been victors in wrestling, boxing, etc.

## Hair washing festival :

When the king washes his hair they celebrate a great festival, and send him great presents, each person seeking to outrival his neighbour in displaying his wealth.<sup>1</sup> They say that of the gold digging ants some are winged, and that the Indian rivers, like the Iberian,<sup>2</sup> carry down gold dust. In the processions at their festivals, many elephants adorned with gold and silver are in the train, as well as four horsed chariots and yokes of oxen. Then comes a great host of attendants in their holiday attire, with vessels of gold, such as large basins and gobletss, six feet in breadth, tables, chairs of state, drinking cups and lavers all made of Indian copper, and set many of them with precious stones – emeralds, beryls, and Indian garnets – garments embroidered and interwoven with gold, with beasts – such as buffaloes, leopards, tame lions and a multitude of birds of variegated plumage and fine song.<sup>3</sup> Kleitarchos<sup>4</sup>

1. A passage from Herodotos (ix. 110) shows that this ceremony was performed on his birthday: ‘This royal feast is prepared once a year, on the day on which the king (Xerxes) was born; and the name of this feast is, in the Persian language, *tykta*, and in the Greek language, *teleion* (perfect); and then only the king washes his head with soap and makes presents to the Persians.’
2. Iberia is here not Spain but the country between the Black sea and Kaspian now called Georgia.
3. With this may be compared the description to be found in Athenaios (iv. 4, 5, 6) of the procession of Antiochos Epiphanes, and that of Ptolemy Philadelphos. Compare also Q. Curtius, Book viii. 9.
4. Kleitarchos, the son of Deinon the historian, accompanied Alexander the Great in his Asiatic expedition, and wrote a history of it which is erroneously supposed to have been adopted by Q. Curtius as the basis of his history of the

mentions four wheeled carriages carrying trees of the large leaved sort, from which were suspended in cages different kinds of tame birds, among which he speaks of the *orion*<sup>5</sup> as that which had the sweetest note, and of another called the *katreus*<sup>6</sup> which was the most beauti-

great conqueror. Cicero impugns his veracity as does also Quintilian, and his style is ridiculed by Longinus. Fragments of his work have been preserved by Plutarch, Pliny, and Athenaios, as well as by Strabo.

5. The Orion is thus described by Aelian in his *Hist. Animal.*, xvii. 22: Kleitarchos says that there is an Indian bird which is excessively erotic, and is called the Orion. We shall describe it in the very terms Kleitarchos himself employs. It equals in size the largest kind of herons. Its legs, like theirs, are red, but its eyes, unlike theirs, are blue. It has been taught by Nature herself to warble strains sweet as a bridal chant, and as lulling to the ear as a wedding lay or the alluring melodies sung by the Sirens.'

6. Aelian has described from Kleitarchos the Katreus as well as the Orion (*Hist. Anim.* xvii. 23). 'Kleitarchos says that an Indian bird called the Katreus is of surpassing beauty that it is about the size of a peacock, and that the tips of its feathers are of an emerald green. When it looks at others, you cannot distinguish the colour of its eyes but when it looks at you, you would say that they are vermillion except the pupil. This is tinted like an apple, and its glance is keen. That part of the eye which is white in others is in the Katreus a pale yellow. The down on its head is azure, but here and there variegated with spots of saffron, while its legs are of an orange colour. Its voice is melodious and thrilling like the nightingale's. The Indians keep them in aviaries, that they may be able to feast their eyes with their loveliness.' Dr. V. Ball thinks the Katreus was the monal pheasant. 'It is probable,' he says, 'that monal pheasants, captured in the Himalayas, were brought into India for sale, and thus became known to the Greeks. The same bird is, I believe, referred to under the name *Catreus* by Strabo,

ful in appearance, and had the most variegated plumage. In figure it approached nearest to the peacock, but the rest of the description must be taken from Kleitarchos. (Strabo, XV. i. 69).

#### White dress of the Indians :

The Pramnai of the city live in towns and wear muslin robes, while those of the country clothe themselves with the skins of fawns or antelopes. In a word, the Indians wear white apparel—white muslin and linen (contrary to the statements of those who say that they wear garments dyed of florid hues); all of them wear long hair and long beards, plait their hair and bind it with a fillet. (Strabo, XV. i. 71).

#### Racing and betting :

The Indians make much ado also about the oxen that run fast; and both the king himself and many of the greatest nobles take contending views of their swiftness, and make bets in gold and silver, and think it no

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where he quotes from Cleitarchos, and tells us that the bird was beautiful in appearance, had variegated plumage, and approached the peacock in shape. A suggestion that this was a bird of paradise is, therefore absurd, and is otherwise most improbable, since birds of paradise are found not in India but in New Guinea. With this also I am inclined to identify 'the partridge larger than the vulture.' which, as related by Strabo on the authority of Nicolaus Damascenus, was sent by Porus, with other presents, in charge of an embassy, to Augustus Caesar.' *From a Paper read before the Royal Irish Academy, June 9, 1884.* Nonnus has also described the Katreus: 'It is, he says (Dion. xxvi. 207 sqq.) 'by nature tinted yellow and is shrill voiced. From its eyes it darts out glances bright as the beams of kindling day. Its wings of purple grain are of surpassing beauty. Muller suggests that these birds are the Indian Sirens of whom Dionon speaks.

disgrace to stake their money on these animals. They yoke them in chariots, and incur hazard on the chance of victory. The horses that are yoked to the car run in the middle with an ox on each side, and one of these wheels sharp round the turning post and must run thirty stadia. The oxen run at a pace equal to that of the horses, and you could not decide which was the fleeter, the ox or the horse. And if the king has laid a wager on his own oxen with any one, he becomes so excited over the contest that he follows in his chariot to instigate the driver to speed faster. The driver again pricks the horses with the goad till the blood streams, but he keeps his hand off the oxen, for they run without needing the goad. And to such a pitch does the emulation in the match between the oxen rise, that not only do the rich and the owners of the oxen lay heavy bets upon them, but even the spectators, just as Idomeneus the Cretan and the Locrian Ajax are represented in Homer<sup>1</sup> betting against each other. (Aelian, Book XV, C. xxiv.)

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### The Indian dress :

The dress worn by the Indians is made of cotton, as Nearchos tells us - cotton produced from those trees of which mention has already been made.<sup>2</sup> But this cotton is either of a brighter white colour than any cotton found elsewhere, or the darkness of the Indian complexion makes their apparel look so much the whiter. They wear and undergarment of cotton which reaches below the knee halfway down to the ankles,

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1. See *Iliad*, xxiii. 495.

2. A slip on the part of Arrian, as no previous mention has been made of the cotton tree.

and also an upper garment which they throw partly over their shoulders, and partly twist in folds round their head.<sup>2</sup> The Indians wear also earrings of ivory but only such of them do this as are very wealthy, for all Indians do not wear them. Their beards, Nearchos tells us, they dye of one hue and another, according to taste. Some dye their white beards to make them look as white as possible, but others dye them blue; while some again prefer a red tint, some a purple, and others a rank green.<sup>3</sup> Such Indians, he also says, as are thought anything of, use parasols as a screen from the heat. They wear shoes made of white leather, and

2. The valuable properties of the cotton wool produced from the cotton shrub (*Gossypium herbaceum*) were early discovered. And we read in *Rig-veda* hymns of 'Day and Night' like 'two famous female weavers' intertwining the extended thread... Cotton in its manufactured state was new to the Greeks who accompanied Alexander the Great to India. They describe Hindus as clothed in garments made from wool which grows on trees. One cloth, they say, reaches to the middle of the leg, whilst another is folded round the shoulders. Hindus still dress in the fashion thus described, which is also alluded to in old Sanskrit literature. In the frescoes on the caves of Ajanta this costume is carefully represented.....The cloth which Nearchus speaks of reaching to the middle of the leg is the Dhoti. It is from  $2\frac{1}{2}$  to  $3\frac{1}{2}$  yards long by 2 to 3 feet broad...It is a costume much resembling that of a Greek statue, and the only change observable within 3,000 years, is that the Dhoti may now be somewhat broader and longer.' Mrs. Manning's: *Ancient and Medieval India*. vol. II. pp. 356-8.

3. Perhaps some of these colours were but transition shades assumed by the dye before settling to its final hue. The readers of Warren's *Ten Thousand a Year* will remember the plight of the hero of the tale when having dyed his hair he found it, chameleon-like, changing from hue to hue. This custom is mentioned also by Strabo.

these are elaborately trimmed, while the soles are variegated, and made of great thickness to make wearer seem so much the taller. (Arr. Frag. XVI).

### Animals for conveyance:

The Indians are in person slender and tall, and of much lighter weight than other men. The animals used by the common sort for riding on are camels and horses and asses, while the wealthy use elephants, for it is the elephant which in India carries royalty.<sup>1</sup> The conveyance which ranks next in honour is the chariot and four; the camel ranks third; while to be drawn by a single horse is considered no distinction at all.<sup>2</sup> But Indian women, if possessed of uncommon discretion, would not stray from virtue for any reward short of an elephant, but on receiving this a lady lets the giver enjoy her person. Nor do the Indians consider it any disgrace to a women to grant her favours for an elephant, but it is rather regarded as a high compliment to the sex that their charms should be deemed worth an elephant. They marry without either giving or taking dowries, but the women, as soon as they are marriageable, are brought forward by their fathers and exposed in public to be selected by the victor in wrestling or boxing or running, or by some one who excels in any other manly exercise.<sup>3</sup> The people of India live upon grain, and are tillers of the soil; but we must except the hillmen, who eat the flesh of beasts of chase. (Arr. Frag. XVII.)

1. Hence one of his names is *Vāraṇa*, implying that he not only carries but protects his royal rider.
2. The *ekka*, so common in the north west of India, is no doubt here indicated.
3. Marriage customs appear to have varied, as a reference to the extract from Strabo xv. i. 53-56 will show. See Wheeler's *History of India*, pp. 167-8.

## CHAPTER IV

### Economic Enterprises, Natural and Mineral resources.

#### Sowing of crops :

India, as Eratosthenes states, is watered by the summer rains, and the level country is inundated. During the rainy season, flax and millet, as well as sesamum, rice and bosmoron are sown; and in the winter season, wheat, barley, pulse, and other esculents with which we are unacquainted. (Strabo, XV. i. 13).

#### Accretion of land :

Nearchos,<sup>1</sup> speaking about the accretion of land produced by the rivers, advances these instances. The plains of the Hermos, Kaystros, Maiandros, and Kaikos are so named, because the plains owe their growth, or rather their production to the deposition of great quantities of soft and fertile soil which the rivers bring down from the mountains, so that the plains are, so to speak, the offspring of the rivers, and it is said with truth that the plains belong to them. This exactly agrees with what is said by Herodotus<sup>2</sup> in speaking of the Nile and the land about it, namely, that the land is the gift of the river. Hence Nearchos says that the Nile was properly called by the same name as Egypt. (Strabo, XV. i. 16).

#### Irrigation by rivers :

Aristoboulos<sup>1</sup> states what follows: Rain and snow

1. This passage from Nearchos has been quoted by Arrian also. See his *Anabasis*, Book v. c. 6.
2. Herod. ii. 5.
1. Aristoboulos, a native of Kassandreia, accompanied Alexander on his eastern expedition and wrote a history of his wars,

fall only on the mountains and the regions which lie at their base, and the plains experience neither the one nor the other, and are never laid under water except when the rivers rise; the mountains are covered with snow in winter and early in spring the rains set in and continue to increase pouring down in torrents both night and day without any intermission<sup>2</sup> while the Etesian winds which last till the rising of Arcturus<sup>3</sup> prevail; the rivers, on becoming full by the melting of the snow and by the rains, irrigate the level country. (Strabo, XV. i. 17).

#### Plains watered with rains:

Nearchos writes to the same effect, but does not agree with Aristoboulos regarding the summer rains, for he says that the plains are watered with rain in summer, but are without rain in winter. Both writers speak about the rising of the rivers. (Strabo, XV. i. 18).

#### Rice crop:

They add that the land, while still but half-dried, is sown, and though scratched into furrows by any common labourer, it nevertheless brings what is planted

which was one of the principal sources used by Arrian in the composition of his *Anabasis*, and by Plutarch in his *Life of Alexander*. It is said that he began the composition of his history when he was eighty four years of age, and that he lived to ninety.

2. The rains however do not set in before the month of June, but the rivers begin to rise earlier than this, owing to the melting of the snows.
3. The *rising of Arcturus* indicated the beginning of autumn, and the setting of the Pleiades the beginning of winter. The rainy season in India extends to the middle of October or a little later.

to perfection and makes the fruits of good quality. Rice according to Aristoboulos, stands in water and is sown in beds.<sup>1</sup> The plant is four cubits in height, has many ears, and yields a large produce. The time of its ingathering is about the setting of the Pleiades, and it is husked in the same way as barley. It grows elsewhere also — in Baktriane, Babylonia, Sousis, and in

1. This is a practice still. The beds are squares, of which the sides are from twenty to thirty yards in length. They are separated from each other by dikes of earth about two feet in height.

'It has often struck me as strange that in discussion on the antiquity of civilisation more stress has not been laid on the lapse of time proved by the great variety of kinds of cereals, pulses, and vegetables. To take rice, I, when settlement officer in Central India, had a list about forty different kinds of rice, most of which I was able to discriminate, as in discussions on the quality of the soil, the ryots used constantly to point out certain kinds as infallibly indicating certain soils. But the number of kinds of rice is not restricted to forty or fifty. Dealers used to tell me of about two hundred kinds. The exceeding great antiquity of the cultivation of rice in India is proved by the name. 'rice' and the Greek *σόρος* both of which are derived from the Tamil 'arisi'. Rice was exported to Europe from the ancient seaports of Barygaza, the modern Broach, the Sūrpāraka (Surat) which were the headquarters of the western trade, and its exports must date from a time when the people in the west of Bombay and at the mouths of the Indus spoke Dravidian tongues, and the Aryan Sanskrit and dialects derived from it were unknown to the country traders. But before a foreign trade began, numerous varieties must have been developed, and the development of these varieties, with the culture and agricultural skill necessary for their preservation must have required a vast lapse of time, to be numbered by hundreds if not thousands of years.' From a paper by J. F. Hewitt in the *Journal of the R. A. S.* Oct. 1890 p. 730.

Lower Syria. Megillos says that rice is sown before the rains, and that it does not require to be irrigated and transplanted, as it is supplied with abundance of water. Onesikritos says of bosmoron<sup>2</sup> that it is a smaller grain than wheat, and is grown in countries between rivers. It is roasted after being threshed out, and the men are bound by oath not to take it away before it has been roasted, to prevent the seed from being exported. (Strabo, XV. i. 18).

#### Fruit bearing and cotton trees :

What has been said about the inundations of the rivers and the absence of a land breeze is confirmed by Onesikritos; for he says that the coast is marshy, especially at the mouths of the rivers, on account of the deposit of silt, the action of the flood tides and the violence of the winds which blow from the sea.<sup>1</sup> Megasthenes indicates the fertility of India by the fact of the soil producing two crops every year both of fruits and grain. Eratosthenes writes to the same effect, for he speaks of a winter and a summer sowing and of rains at both seasons alike; for a year, he says, never passes in which rain does not fall at these periods, whence ensures a great abundance, the soil never failing to bear crops. An abundance of fruit is produced by trees; and the roots of plants, particularly of large reeds, are sweet, both in their nature and by coction; for the water whether it comes from the clouds or the rivers, is warmed by the rays of the sun. He means, I think, to say, that what is called by other nations the ripening of fruits and juices is called by the Indians

2. Bosmoron is perhaps wild barley, or perhaps millet,

1. The alluvial deposits of the Hindus make swampy soil of which the rice fields of lower Sindh are formed.

coction, and this tends to produce a flavour no less agreeable than the coction by fire. To the same cause he attributes the great flexibility of the branches of trees from which the wheels of carriages are made, as well as the fact that the country has trees upon wool grows. Nearchos says that their webs of fine cotton were made from this wool,<sup>2</sup> and that the Macedonians used it for stuffing mattresses and the padding of saddle. The Seric fabrics are of a similar kind and made from some sorts of byssos bark, by combining the fibres.<sup>3</sup> About reeds he has noted that they yield honey,<sup>4</sup> although there are no bees; and he mentions

2. India has two distinct species of cotton, *gossypium herbaceum*, and *gossypium arboreum* or tree-cotton. The former only is made into cloth, while the latter yields a soft and silky texture, which is used for padding cushions, pillows, etc. Pliny says (xix. I) that Upper Egypt produces a shrub bearing a nut from the inside of which wool is got white and soft.
3. The Seric fabric were silk webs imported from the northern provinces of China. The first ancient author who refers to the use of silk is Aristotle (H. A. V. 19). It may be inferred from what he states, that silk in the raw state was brought from the interior of Asia and manufactured in Kos as early as the fourth century B. C. Florus states (iii. II) that in the Parthian expedition in which Crassus was defeated and slain, the lieutenants of the Parthian King displayed before the Roman army their gilded standards, oscillating with the silken flags which were attached to them. The opinion prevailed among the Romans that silk in its natural state was a fleece found on trees, whence the well-known line in Virgil:—‘Velleraque ut foliis depectant tenuia seres.’
4. The sugar cane is here indicated. The author of the *Periplus* mentions *honey from canes called Sakkhar*. This name represents the Sanskrit *śarkara* in Prakrit form *sakara*. Aelian in his *History of Animals* speaks of a kind of honey

a fruitbearing tree, the produce of which causes intoxication. (Strabo, XV. i. 20).

**Medical plants :**

In the country of Mousikanos there grows of itself, he says, a kind of grainlike wheat, and also a vine which produces wine, though other writers assert that there is no wine in India;<sup>1</sup> on which account, according to Anacharsis,<sup>2</sup> they had neither the pipe nor any other

pressed from reeds, which grew among the Prasioi. Seneca (*Epist. 84*) speaks of sugar as a kind of honey found in India on the leaves of reeds, which had either been dropped as dew, or had been exuded from the reeds themselves. Lucan referring to the Indians of the Ganges, says that they quaff sweet juices from tender reeds.

1. Q. Curtius (viii. 9) asserts that wine is much used by all the Indians, whereas Megasthenes, who had the best means of knowing, says that they used it only on sacrificial occasions. The Brahmans of the Ganges punished intoxication with great severity. The people of the Punjab, on the other hand, were by no means abstemious. The author of the *Periplus* mentions wine as one of the Indian imports.
2. Anacharsis the Skythian, who is sometimes reckoned as one of the seven wise men of antiquity, was the brother of Saulios the King of Thrace and uncle of the next king—that Idanthyrsos in whose reign the Skythians were invaded by Darius, the son of Hystaspes. He travelled through many countries in pursuit of knowledge and came to Athens in the days when Solon was occupied with his legislative measures. He knocked, Plutarch tells us, at Solon's door, and requested his friendship. Solon answered that friendships are best formed at home. Then, do you, said Anacharsis, who are at home, take me into your house and make me your friend. The sharp and ready wit of this reply is said to have impressed the great legislator so favourably that he admitted Anacharsis to a share both of his friendship and of his counsels. In Athens his simple mode of life, the shrewdness

musical instruments except cymbals and drums and the rattles used by jugglers. Both Aristoboulos and other writers relate that India produces many medicinal plants and roots both of a salutary and a noxious quality, and plants which yield a great variety of dyes.<sup>3</sup> He adds that it was ordained by law that if any person discovered a deadly substance, he should be put to death unless he also discovered an antidote. If he discovered one, he was rewarded by the king. India, like Arabia and Ethiopia, produces cinnamon and spikenard and other aromatics. It has a temperature like theirs in respect of the sun's rays, but it surpasses them in having copious supplies of water, whence the atmosphere is humid, and therefore more nutritious and productive, as is equally the case with the land and the water. On this account the land and the water animals in India are found to be of a larger size than they are in other countries. (Strabo, XV. i. 22).

of his observations, and his acute criticisms of Greek manners and institutions excited much public attention and admiration. After he had returned to his own country he was slain by his brother Saulios whose wrath had been kindled on finding him engaged in celebrating foreign rites — the orgies of Kybele. He is said to have written a work on legislation and the art of war. Several letters ascribed to him are still extant, and one of these is quoted by Cicero in his *Tusculan Disputations* (v. 32). Some of these particulars, besides others, will be found in Herodotus iv. 46, 76, 77; in Plutarch's *Solon*; in Lucian's *Anacharsis* and *Skytha*, and in several passages of Athenaios.

3. Indigo (the *Indikon Melan* of the *Periplus*, and the *Nīlī* of Sanskrit) may be specified as one of the principal, for it appears pretty certain that the culture of the indigo plant, and the preparation of the drug, have been practised in India from a very remote period.

### Co-operative Farming :

Among other tribes again the land is cultivated by families in common, and when the crops are collected, each person takes a load for his support throughout the year. The remainder of the produce is burned to give them a reason for setting to work anew, and not remaining idle.<sup>1</sup> (Strabo, XV. i. 66).

### Ingenuity of Indian artisans :

With a view to show their ingenuity in works of art, he relates that when they saw sponges in use among the Macedonians, they imitated them by sewing hairs, thin strings and threads into wool; when the wool had been pressed into felt, they partly carded it and partly dyed it of colours. Many of them also quickly became makers of currycombs and vessels for oil. (Strabo, XV. i. 67 ).

### Gold mines :

The Indians obtain the great quantity of gold from which they supply the before mentioned dust to the king, in the manner presently described. That part of

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1. Here is indicated the system of the Indian village community, which in all its essential features has remained unchanged from the earliest times down to the present day. Such a community occupies a certain extent of land, the boundaries of which are carefully fixed, though often disputed. Sometimes it is cultivated by the united labour of the inhabitants; but more usually each ploughs his separate field, leaving always a large portion of common. Whatever change may take place in the supreme authority, the peculiar constitution of each township remains unaltered. No revolutions affect it, no conquest changes it. In such communities the Greeks recognised characteristics which forcibly reminded them of their petty independent republics which existed in their own country. See *British India* of the Edinburgh Cabinet Library, vol. ii. pp. 329, 330.

India towards the rising sun is all sand; for of the people with whom we are acquainted, and of whom anything certain is told, the Indians live the farthest towards the east and the sunrise, of all the inhabitants of Asia, for the Indian's country towards the east is a desert by reason of the sands. (Hero. Book. III-98).

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### Gold Diggers and their ants :

There are other Indians bordering on the city of Caspatyrus<sup>1</sup> and the country of Pactyice, settled northward of the other Indians, whose mode of life resembles that of the Bactrians. They are the most warlike of the Indians, and these are they who are sent to procure the gold; for near this part is a desert by reason of the sands.<sup>2</sup> In this desert, then, and in the sand, there are ants in size somewhat less indeed than dogs, but

1. Kaspatyros is evidently the city called Kaspapyrus by Hekataeus, who speaks of it as a city of the Gandarians. The Sanskrit name Kasyapapur by a slight contraction gives the form used by Hekataeus. The position of this place has been much discussed. Heeren took it to be Kabul, but in the opinion held by Lassen, Humboldt and other writers Kaspatyrus is taken to be Kashmir. On the latter supposition the river on which Skylax embarked would be the Hydaspes or Jiblam. In Ptolemy's *Geography* Kashmir appears in the form Kaspeiria, whose sovereigns had extended their rule far beyond the limits of the present kingdom of Kashmir.
2. The vague idea that all to the east of the Indians was a sandy desert probably arose in the first instance from the real fact of the occurrence of a broad desert tract to the east of the fertile lands of the Indus, and would be confirmed by vague reports that similar deserts were found also to the east of Bactria and the adjoining countries. Bunbury's *His. of Anc. Geog.* I. 229, 230.

larger than foxes.<sup>3</sup> Some of them are in possession of the King of the Persians, which were taken there. These ants, forming their habitations underground, heap up the sand, as the ants in Greece do, and in the same manner; and they are very like them in shape. The sand that is heaped up is mixed with gold. The Indians therefore go to the desert to get this sand, each man having three camels on either side, a male one harnessed to draw by the side, and a female in the middle. This last man mounts himself, having taken care to yoke one that has been separated from her young as recently born as possible; for camels are not inferior to horses in swiftness, and are much better able to carry burdens. (Hero. Book III. 102).

#### Plan of gold digging :

The Indians then adopting such a plan and such a method of harnessing, set out for the gold, having before calculated the time, so as to be engaged in their plunder during the hottest part of the day, for during the heat the ants hide themselves under the ground. Amongst these people the sun is hottest in the morning, and not, as amongst others, at mid day, from the time

3. The story of the ant gold was repeated by Megasthenes, and Nearchos, who is a trustworthy writer, says that he saw somewhere in India the skin of one of the gold digging ants. It has been supposed that this was the skin of a marmot, or some such burrowing animal. The fable is a genuine Indian tradition, for in his *Ariana* (p. 135), Professor Wilson cites a passage from the *Mahābhārata*, wherein mention is made of 'that gold which is dug up by Pipilikas (ants) and is therefore called Pippilikas (ant-gold).' The Pippilikas were therefore probably Tibetan miners, since Megasthenes states that the gold was carried away from the Derdai, that is the people of Dardistan.

that it has risen some way, to the breaking up of the market; during this time it scorches more than at mid day in Greece, so that, it is said, they then refresh themselves in water. Mid-day scorches other men much the same as the Indians; but as the day declines, the sun becomes to them as it is to others in the morning; and after this, as it proceeds, it becomes still colder, until sunset; then it is very cold. (Hero. Book III. 104).

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### **The dangers :**

When the Indians arrive at the spot, having sacks with them, they fill them with the sand, and return with all possible expedition. For the ants, as the Persians say, immediately discovering them by the smell, pursue them, and they are equalled in swiftness by no other animal, so that the Indians, if they did not get the start of them while the ants were assembling, not a man of them could be saved. Now the male camels (for they are inferior in speed to the females) slacken their pace, dragging on, not both equally, but the females mindful of the young they have left, do not slacken their pace. Thus the Indians, as the Persians say, obtain the greatest part of their gold; and they have some small quantity more that is dug in the country. (Hero. Book III. 105).

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### **Account of the Ants :**

Megasthenes gives the following account of these ants. Among the Derbai, a great tribe of Indians, who inhabit the mountains on the eastern borders,<sup>1</sup> there

1. These are the Dardae of Pliny, the Daradrai of Ptolemy and the Daradas of Sanskrit literature. 'The Dards are not an extinct race. According to the accounts of modern travellers, they consist of several wild and predatory tribes dwelling

it is cut out like blocks from a quarry and is continually reproduced, whence a greater revenue accrues to the sovereigns of the country than they derive from gold and pearls.<sup>1</sup>

### Corals :

Book XXXII. c. 2(11). Among the people of India as high a value is set upon coral as in our part of the world is set upon Indian pearls, of which we have said enough in the proper place; for prices are determined by the fashion prevailing in each country...The berries of coral are no less appreciated by the men of India than are Indian pearls by women among us. Their soothsayers and prophets regard coral as the most sacred of amulets ensuring protection against all dangers, so highly do they value it both as an ornament and an object of devotion. C. 6(21). According to the historians of the expedition of Alexander, oysters were found in the Indian Sea a foot in diameter.

### Gold :

Book. XXXIII. c. 4. Gold is found in our own part of the world, to say nothing of the gold dug out of the earth in India by ants, and in Scythia by the griffins. C. 13 (57). It is not long since *indicum* began to be imported,<sup>2</sup> its price being 17 denarii per pound.<sup>3</sup>

1. *Ormenus*, or *Oromenus*, designates the Salt range of hills between the Indus and Hydaspes (Jihlam).
2. The culture of the indigo plant and the preparation of the drug have been practised in India from very remote times. It has been questioned, but without good reason whether *indicum* was indigo.
3. The value of the denarius in the time of Pliny may be taken at 8½d. It was a silver coin containing fifty-eight grains of pure silver.

### Indicum :

Book XXXV. c. 6(25). We have indicum, also a substance imported from India, with the composition of which I am unacquainted. C. 6(27) Next to this (purpurissum) in importance is indicum. It comes from India and is a slime which adheres to the scum (*spumoe*) of certain reeds.<sup>4</sup> When broken small it is of a black appearance, but when diluted it exhibits a wondrous combination of purple and deep azure. There is another kind of it which floats in the caldrons in the purple dye houses, and is the scum of the purple dye.<sup>5</sup> Those who adulterate it stain pigeons' dung with genuine indicum, or they dye either selinusian<sup>6</sup> or anularian chalk with woad. Indicum is tested by placing it on hot coals when, if it be genuine, it gives out a fine purple flame, and while smoking, a scent as of sea water. Hence some think that it has been gathered from rocks near the shore. The price of indicum is twenty sesterces per pound. If used as a medicine, indicum acts as a sedative for ague and other shivering fits and desicates sores.

### Crystals :

Book XXXVII c. 1(9). The East, too, sends us crystals, there being none preferred to the Indian kind.

### Amber :

C. 2(11). Amber is found in India, where it is a preferable substitute for frankincense. Ctesias says that

4. Pliny is quite mistaken as to the mode by which indigo is produced.

5. This passage, similar in many respects to the account given by Dioscorides, is commented on at great length by Beckmann, *Hist. Inv.* vol. ii. p. 263. Bohn's *Trans. of Pliny*. vi. 243. n.

6. It is uncertain whether this chalk was found at Selinus in Sicily or at the Cilician seaport of the same name. The anularian chalk, when made into a glassy paste, was worn by the common people in their signet rings, whence its name.

is an elevated plateau\* about 3000 stadia in circuit. Beneath surface there are mines of gold, and here accordingly are found the ants which dig for that metal. They are not inferior in size to wild foxes. They run with amazing speed, and live by the produce of the chase. The time when they dig is winter.<sup>3</sup> They throw up heaps of earth, as moles do, at the mouth of the mines. The gold dust has to be subjected to a little boiling. The people of the neighbourhood, coming secretly with beats of burden, carry this off. If they came openly the ants would attack them, and pursue them if they fled, and would destroy both them and their cattle. So, to effect the robbery without being observed, they lay down in several different places pieces of the flesh of wild beasts, and when the ants are by this device dispersed they carry off the gold dust. This they sell to any trader they meet with<sup>4</sup> while it is still in the state of ore, for the art of fusing metals is unknown to them.<sup>5</sup> (Frag. XXXIX, Strabo XV i. 44).

among the mountains on the north west frontier of Kashmir and by the banks of the Indus.' *Ind. Ant.* loc. cit.

2. The table land of Chojotol, see *Jour. R. Geog. Soc.* vol. XXXIX, pp. 149 seqq. Ed. *Ind. Ant.*
3. The miners of Thok-Jalung, inspite of the cold, prefer working in winter; and the number of their tents, which in summer amounts to three hundred, rises to nearly six hundred in winter. They prefer the winter, as the frozen soil then stands well, and is not likely to trouble them much by falling in. *Id.*
4. *Των τυχαντι των εμπορων.* If the different reading *των γυχαντος των εμπορων* be adopted, the rendering is. "They dispose of it to merchants at any price."
5. Cf. Herod. III. 102-105; Arrian, *Anab.* V. 4. 7; Aelian *Hist. Anim.* III. 4; Clem. Alex. *Poed.* II. p. 207; Tzetz. *Chil.* XII 330-340; Plin. *Hist. Nat.* XI. 36, XXXIII. 21; Propert. III. 13.5; Pomp. Mel. VII. 2; Isidor. *Orig.* XII. 3; Albert

### The Value of gold :

They get the gold from ants. These creatures are larger than foxes, but are in other respects like the ants of our own country. They dig holes in the earth like other ants. The heap which they throw up consists of gold, the purest and brightest in all the world. The mounds are piled up close to each other in regular order like hillocks of gold dust, whereby all the plain is made effulgent. It is difficult, therefore, to look towards the sun, and many who have attempted to do this have thereby destroyed their eyesight. The people who are next neighbours to the ants, with a view to plunder these heaps, cross the intervening desert, which is of no great extent, mounted on wagons to which they have yoked their swiftest horses. They arrive at noon, a time when the ants have gone underground, and at once seizing the booty make off at full speed. The ants, on learning what has been done, pursue the fugitives, and overtaking them fight with them till they conquer or die, for of all animals they are the most courageous. It hence appears that they understand the worth of gold, and that they will sacrifice their lives rather than part with it. (Dio Chrysot Cf. Fragm. XXXIV and XL).

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### Indian Minerals and Precious Stones :

Book XXXI. c. 7. There are mountains also formed of native salt, as for instance, Ormenus, in India, where

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Mag. *De Animal.* T. VI. p. 678, ex. subdititus Alexandri epistolis; Anonym. *De Monstris et Belluis*, 259 ed. Berger De Xivrey; Philostratus *Vit. Apollon.* VI. I; and Heliodorus, *Aeth.* X 26. p. 495; also Gildemeister, *Script Arab. de. reb. Ind.* p. 220-221 and 120; Busbequius, *Legationis Turcicoi Epist.* IV. pp. 144, or Thaunus XXIV. 7, p. 809 Schwanbeck, p. 72.

in India is a river, the Hypobarus, and that the meaning of its name is *the bearer of all good things*— that it flows from the north into the Eastern Ocean near a mountain covered with trees that produced amber (electron), and that these trees are called aphytacoraea name signifying *luscious sweetness*.<sup>7</sup>

7. The elektron or amber of Ktesias, a product of trees, was certainly *shellac*, and the insects found with it, which yielded a red dye, were lac insects. Dr. V. Ball, *A Geologist's Contribution to the History of Ancient India* p. 81.

#### Diamonds :

C. 4.(15). At the present day for the first time six varieties of the diamond (adamas) are recognised. The Indian diamond is not found embedded in gold, but in a substance akin to crystal, which it equals in transparency and resembles in having six angles and six highly polished equal sides, while it is turbinated to a point at either extremity just as if two cones should, to our wonder; be conjoined at their bases. As for size, it is as large even as a hazel nut.<sup>8</sup>

8. 'Dana has the following remarks upon the word *adamas*:' This name was applied by the ancients to several minerals differing much in their physical properties. A few of these are quartz, specular iron ore, emery, and other substances of rather high degrees of hardness which cannot now be identified. It is doubtful whether Pliny had any acquaintance with the real diamond. 'System of Mineralogy, Art. Diamond. Under the head of *Adamas*, the diamond appears to have been included together with some other stones. 'It is,' says Pliny, 'the substance that possesses the greatest value, not only among the precious stones, but of all human possessions, a mineral which for a long time was known to kings only, and to very few of them.' Where, however, he refers to its hexangular and hexahedral form, he appears to have been alluding to some other mineral; but his mention of splinters

### Pearls :

C. 4 (16). Next in esteem with us (to diamonds) are the pearls of India and Arabia. C. 5 (20) It is thought by many that beryls are of the same, or at all events of a like nature with emeralds. India produces them, and they are rarely found elsewhere...

### Beryls :

The Indians take a marvellous pleasure in beryls that are distinguished by their great length, and say that these are the only precious stones which they prefer to wear without gold; and hence, after piercing them, they string them upon elephant bristles. It is agreed that those beryls which are of perfect quality should not be perforated, but should merely be clasped at their extremities with circlets of gold. They prefer therefore to cut them into the form of a cylinder rather than to set them as precious stones since those that are of greatest length are most in fashion. Some are of opinion that beryls are naturally angular and by piercing them adds to their splendour in consequence of the removal of the white substance within, while the reflection of the gold still further heightens their brilliancy, and the thickness no longer mars their transparency. The Indians by colouring crystals have found a way of imitating a variety of precious stones, especially beryls.

### Opals :

C. 6 (21). Opals are at once very like and very unlike beryls, and are inferior in value to emeralds alone.

as being used by engravers of other stones again points to the true diamond. He says it could only be broken after being steeped in the blood of a he-goat. Dr. V. Bali, 'A Geologist's Contribution to the History of Ancient India.'

India, too, is the sole mother of these precious stones, thus completing her glory as being the great producer of the most costly gems.<sup>9</sup> C. 6 (22) This stone (the opal), on account of its extraordinary beauty, has been called by many authors *paederos*;<sup>10</sup> such as make a distinct species of it say that it is the gem called by the people of India *sangenon*.

### Sardonyx :

C. 6 (23). By sardonyx, as the name itself implies, was formerly meant a *Sarda* with a whiteness in it like the flesh under the human finger nail, the white part being transparent like the rest of the stone;<sup>11</sup> and that this was the character of the Indian sardonyx is stated by Ismenias, Demostratus, Zenothemis and Sotacus. The last two give the name of *blind* sardonyx to all the other stones of this class which are not transparent and which have now monopolised the name... Zenothemis writes that these stones were not held in esteem by the Indians, and that some were so large that the hilts of swords were made of them. It is well known that in that country they are laid bare to view by the mountain streams, and that in our part of the world they were at the outset prized from the fact that they were almost

9. The opal is, however, found in many parts of the world besides India.

10. This word means *lovely youth*.

11. Ktesias informs us that in India there are certain high mountains with mines which yield the sardine stone and onyxes and other seal stones. He gives no indication of the locality of these mountains, but Dr. V. Ball says that possibly Oujein, in Malwa, or some of the other places where mines of Chalcedonic minerals occur, was intended. The word *sardonyx* is compounded of the Greek words *αρσενικός*, 'sard', and *ονυξ* 'a finger nail.'

the only ones<sup>12</sup> among engraved precious stones that do not take away the wax with them from an impression. We have in consequence taught the Indians, themselves by the force of our example to value these stones, and the lower classes more particularly pierce them and wear them round the neck; and this is now a proof that a sardonyx is of Indian origin. Those of Arabia are distinguished above others by a broad belt of brilliant white which does not glitter in hollow fissures or in the depressions of the stone, but sparkles in the projections at the surface above an underlying ground of intense black. In the stones of India this ground is like wax<sup>13</sup> or cornel in colour, with a belt also of white around it. In some of these stones there is a play of colours as in the rainbow, while the surface is even redder than the shells of the sea-locust.

#### Oynx:

C. 6(24). Zenothemis says there are numerous varieties of the Indian onyx<sup>14</sup> the fiery-coloured, the black, the cornel with white veins encircling them like an eye, and in some cases running across them obliquely. Sotacus mentions that there is also an Arabian onyx, which differs from that of India in that the latter exhibits small flames each encircled with one more belts of white in a different way from the Indian sardonyx, which is speckled but not marked with circular veins like the onyx. According to this writer onyxes are found in Arabia of a black colour with belts of white.

12. He probably intends to include the sarda or cornelian here - Bohn's *Trans. of Pliny*.
13. A variety, probably, of common chalcedony. *Ibid.*
14. The onyx is an agate formed of alternating white and black or dark brown stripes of chalcedony. The finest specimens are brought from India. The word means *finger-nail*.

Satyrus says that there is an onyx in India of a flesh colour,<sup>15</sup> partly resembling the carbuncle and partly the chrysolite and the amethyst and he condemns the whole of this class. The real onyx he points out, has numerous veins of varying colours, along with streaks of a milk-white hue, and as these colours along with streaks of a milk-white hue, and as these colours harmoniously shade into each other they produce, by their combinations, a tint of a beauty which is in expressibly charming.

### Carbuncle :

C. 7 (25). In the first rank among these *precious stones of a brilliancy like flame* is the carbuncle, so called from its resemblance to fire,<sup>16</sup> although it is not fusible in fire; whence these stones are by some called acaustoi.<sup>17</sup> There are various kinds of this stone, as the Indian and the Garamantic, the latter being called also the Carchedonian<sup>18</sup> from the opulence of Great Carthage... Satyrus says that the Indian carbuncles are not lustrous but mostly of a dirty appearance, and always looking as if their lustre had been scorched with violent heat.....They admit of being hollowed out and making vessels that can hold even a sextarius.<sup>19</sup> Many writers have asserted that the Indian stones are whiter than the Carchedonian, and if viewed obliquely shine with impaired

15. It is somewhat doubtful whether this kind of onyx (*carnelian* or *cornelian*) derives its name from *caro, carnis*, 'flesh', or from *cornus*, 'the cornel.'
16. The word *carbunculus* means a *red-hot coal*. That of Pliny is supposed to include not only the red, or iron and iron-lime garnet, but the Spinelle ruby also, or Oriental ruby - Bohn's *Trans. of Pliny*.
17. That is, *incombustible*.
18. Karchedon is the Greek name of Carthage.
19. About a pint.

lustre, while the latter are quite oppositely affected if similarly viewed.

### Sandastros :

C. 7 (28). The Sandastros is found in India at a place of that name.<sup>20</sup> It is produced also in Arabia towards the south. Its supreme virtue is that, like fire enveloped in a transparent substance, it shines inwardly with starlike scintillations like drops of gold which are always seen in the body of the stone and never on the surface... The Indian stones are said even to dim the sight by *reason of their brilliancy*... Some prefer the Arabian stones to the Indian and say that the former kind resemble a smoke coloured chrysolith..... Nicander speaks of a stone which he calls Sandaresion.....which is produced in India and takes its name from the place where it is found. It is of the colour of an apple or of green oil and is regarded as worthless.

### Lychnis :

C. 7 (29). To the same class of flame coloured stones belongs that known as the lychnis so called because its lustre is enhanced by lamplight,<sup>21</sup> and when

20. 'Sandaresus and *Sandsirus* are other readings. This stone has not been identified but Ajasson is inclined to think that it may have been Aventurine quartz, and is the more inclined to this opinion, as that mineral is found in Persia, and *sandastra* or *tchandastra* is purely a Sanskrit word. The description, however, would hardly seem to apply to Aventurine'—*Ibid.* The form *Sandaresus* suggests the names being a compound of *Chandra*, which means *glittering*, with some other word or affix.

21. From *λυχνός* a *lighted lamp or torch*. Brotero is of opinion that this is the cherry-coloured ruby.....From the distinct reference made to its electric nature, Ajasson identifies it with tourmaline, a silicate of alumina. Beckmann is of the same opinion.

so seen is particularly pleasing. It is found in the neighbourhood of Orthosia and all over Caria and the adjoining localities, but the most approved stones are those which come from India.

**Sarda:**

C. 7 (31). In India three varieties of the Sarda<sup>22</sup> are found; the red Sarda, the one called from its thickness *pionia*, and a third kind beneath which they place a ground of silver foil. The Indian stones are transparent, those of Arabia more opaque.

**Calliana:**

C. 8 (33). The stone Callaina is of a pale green colour,<sup>23</sup> and is found in the countries that lie behind India, among the Phycari who inhabit Mount Caucasus, the Sacae, and the Dahae... A superior kind is found in Carmania.

**Nilion:**

C. 8 (35). India, which produces these stones (various kinds of green stones such as *prasius* and *Chrysoprasus*), produces Nilion<sup>24</sup> also, a stone which is inferior in lustre to the chrysoparasus, and even loses what lustre it has when you gaze steadily at it.

**Jasper:**

C. 8 (37). Many countries produce this stone (jasper). The Indian jasper is like the smaragdus in colour.

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22. Sarda is the carnelian when of a very deep red colour. According to Pliny it was first found at Sardis, and thence its name.

23. Some take this to be the turquoise, others Oriental Peridot. It is found only in Khorasan in Persia.

24. Nilion or Nile-stone is Egyptian jasper.

### Purple stone :

C. 8 (40). We shall now treat of precious stones of a purple colour or of shades of purple. Among these, Indian amethysts<sup>25</sup> hold the foremost place..... The Indian kind exhibits in absolute perfection the loveliest shade of purple. It is the greatest ambition of the dyer in purple to attain this hue, for it gleams with a tender radiance which does not dazzle one's eye like the colours of the carbuncle. Another kind approaches the hyacinth in colour, and this hue the Indians call *socon* and the stone itself *socondion*.

### Aethiopia :

C. 9 (42). Aethiopia produces hyacinths also chrysoliths — transparent stones of a golden brilliancy. The stones of India are preferred to these... The best are those which, when placed beside gold, give it a whitish appearance like silver.

### Melichrysus :

C. 9 (45). To this class belongs the stone called Melichrysus,<sup>26</sup> so called because it looks like pure honey seen through transparent gold. India produces this stone, which, although it be hard, is brittle, but not displeasing to the eye

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25. The name, as some have supposed, is derived from a priv., and  $\mu\acute{e}f\acute{u}w$  to 'intoxicate', as if the stone was a remedy against drunkenness. Pliny, however, says that the name originated in the peculiar tint of its brilliancy, which after closely approaching the colour of wine, passes off into a violet without being fully pronounced; or else, according to some authorities, in the fact that in their purple there is something that falls short of a fiery colour, the tints fading off and inclining to the colour of wine.

26. Some are of opinion that this was the honey-coloured hyacinth. Others, again, identify it with the yellow honey-coloured topaz; an opinion with which Ajasson coincides. Ibid.

**Xuthon :**

The same country produces also Xuthon,<sup>27</sup> a gem worn by the common people there.

**Sangenon :**

C. 9 (46). Paederos<sup>28</sup> of the finest quality is found in India, where is called Sangenon.

**Asteria :**

C. 9. (47). Next among the white stones is Asteria,<sup>29</sup> which holds a chief place among gems from a peculiarity in its nature whereby it holds a light within as it were in the pupil of an eye. This light shifts to and fro, moving within it according as it is inclined. When held up against the sun it flings back white rays like those of a star, and to this it owes its name. The stones of India are difficult to engrave, and those of Carmania are preferred.

**Astrion :**

C. 9. (48). Similarly white is the stone called Astrion,<sup>30</sup> which closely resembles crystal, and is found in India, on the shores of Patalene. In the centre of it there shines a star with a refulgence like that of the moon when full.

**Agate :**

C. 10. The agates found in India possess like marvellous properties with those found elsewhere, besides

27. Another reading is *Xanthon*, 'yellow.'

28. The opal is already mentioned. Pliny says of it: 'There is no precious stone that has either a clearer water than this or that presents to the eye a more pleasing sweetness.' Owing to its brittleness the opal is never cut into facets, but it is polished with a convex surface which best exhibits its play of colours.

29. This is either Girasol opal or a virtreous asteriated crystal of sapphire.

30. Star - stone - some kind of star-sapphire.

great and marvellous properties peculiar to themselves, for they exhibit the appearance of rivers, groves, beasts of burden.....and horse trappings.<sup>31</sup>

### Atizae :

C. 10 (54). Democritus informs us that in India and on Acidane, a mountain in Persis, a stone is found called Atizae<sup>32</sup> of a silver lustre, three fingers in length of the shape of a lentil, of an agreeable smell, and considered necessary by the Magi when they consecrate a king.....Amphidanes, which is also called chrysocolla,<sup>33</sup> is found in India where the ants dig gold. In this stone there are seen pieces of a square figure like gold. Its nature is said to be similar to that of the magnet except that it has the additional property of increasing gold.

### Corallis :

C. 10 (56). Corallis which is a product of India and Syene, resembles minium (vermilion) in appearance... Chelonia is the eye of the Indian tortoise.<sup>34</sup>

### Haematitis :

C. 10 (60). Haematitis is a stone of a blood red colour.....

### Menui :

There is another of the same kind called Menui by the Indians, and *Xanthos* by the Greeks being of a whitish tawny colour.

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31. Tree and moss agates are here very probably referred to.
32. Ajasson thinks that the reading should be 'aeizoe,' from the Greek *αειζων* 'long lived.'
33. Pliny mentions a fossil of this name in B. XXXIII, c. i. (2). It is, he says, a substance which, in order to appear all the more precious, still retains the name which it has borrowed from gold.
34. This stone has its name from *χελώνη* 'a tortoise'. Pliny says it was used by magicians for divination.

**Ion :**

C. 10 (61). Indica retains the name of the country which produces it. It is a stone of a reddish colour, but when rubbed it exudes a liquid of a purple hue. There is another stone of this name which is white and of a dusty appearance. Ion is an Indian stone of a violet tint,<sup>35</sup> which, however, is seldom found to shine with a full rich lustre.

**Lesbia glaeba :**

C. 10 (62). Lesbia glaeba, so called from Lesbos, the country in which it is produced, is a stone found also in India.

**Mormorin :**

C. 10 (63). Mormorion<sup>36</sup> is a transparent stone from India of a deep black colour and known also as *promnion*.

**Obsian :**

C. 10 (65). Gems of the name and colour of the Obsian<sup>37</sup> stone are found not only in Aethiopia and India, but in Samnium too, and, as some think, upon the shores of Spain contiguous to the ocean.

**Zoranisceos :**

C. 10 (70). Zoranisceos is found in the river Indus. It is a gem said to be used by the magicians, and beyond this I know nothing more of it.

C. 13 (76). The rivers which produce precious stones are the Acesines and the Ganges, and India is of all countries the most prolific of them.

C. 13 (77). There is no country so beautiful, or which, for the productions of nature, merits so high a

35. *Ion* is the Greek name of the violet.

36. According to Ajasson this is schorl or black tourmaline with a base of magnesia.

37. Our 'obsidian.'

place as Italy, the ruler and second parent of the world... Next to Italy, if we except the fabulous regions of India, I, for my part, would rank Spain.

## TREES AND PLANTS

### Fruit trees :

An abundance of fruit is produced by trees; and the roots of plants, particularly of large reeds, are sweet both in their nature and by coction; for the water, whether it comes from the clouds or the rivers, is warmed by the rays of the sun. He means, I think, to say, that what is called by other nations the ripening of fruits and juices is called by the Indians *coction*, and this tends to produce a flavour no less agreeable than the coction by fire. To the same cause he attributes the great flexibility of the branches of trees from which the wheels of carriage are made, as well as the fact that the country has trees upon which wool grows. Nearchos says that their webs of fine cotton were made from this wool,<sup>1</sup> and that the Macedonians used it for stuffing mattresses and the padding of saddles. The Seric fabrics are of a similar kind and made from some sorts of byssos bark, by combing the fibres.<sup>2</sup> About

1. India has two distinct species of cotton, *gossypium herbaceum*, and *gossypium arboreum* or tree-cotton. The former only is made into cloth, while the latter yields a soft and silky texture, which is used for padding cushions, pillows, etc. Pliny says (xix. i.) that Upper Egypt produces a shrub bearing a nut from the inside of which wool is got white and soft.
2. The Seric fabrics were silk-webs imported from the northern provinces of China. The first ancient author who refers to the use of silk is Aristotle (H. A. V. 19). It may be inferred from what he states, that silk in the raw state was brought from the interior of Asia and manufactured in Kos as early

reeds he has noted that they yield honey,<sup>3</sup> although there are no bees; and he mentions a fruit bearing tree, the produce of which causes intoxication. (Strabo, XV. i. 20).

### Remarkable trees :

India produces many remarkable trees among others, one having branches which bend downwards and leaves which are not less in size than a shield. Onesikritos when describing minutely the country of Mousikanos,<sup>1</sup> which he says is situated in the most southern part of India, relates that there are some large trees from which branches grow out to the length even of twelve cubits.

as the fourth century B. C. Florus states (iii. II) that in the Parthian expedition in which Crassus was defeated and slain, the lieutenants of Parthian King displayed before the Roman army their gilded standards, oscillating with the silken flags which were attached to them. The opinion prevailed among the Romans that silk in its natural state was a fleece found on trees, whence the well-known line in Virgil :-

'Velleraque ut foliis depectant tenuia Seres'.

3. The sugar-cane is here indicated. The author of the *Periplus* mentions *honey from canes called sakkar*. This name represents the Sanskrit *sarkara* in its *Prākrit* form *sākara*. Aelian in his *History of Animals* speaks of a kind of honey pressed from reeds, which grew among the *Prasioi*. Seneca (*Epist. 84*) speaks of sugar as a kind of honey found in India on the leaves of reeds, which had either been dropped as dew, or had been exuded from the reeds, themselves. Lucan, referring to the Indians of the Ganges, says that they quaff sweet juices from tender reeds.
1. The kingdom of Mousikanos, to which Strabo makes reference in sundry subsequent passages, lay in Upper Sindh. The ruins of Alor indicate the site on which the capital of this rich and flourishing kingdom stood. According to Saint-Martin, the Moghsis of the present day are the representatives of the ancient Mousikani.

These branches then grow downwards as if they had been bent until they touch the ground. They next penetrate into the soil and take root like shoots that have been planted. Then they spring upwards and form a trunk, whence again, in the manner described, branches bend themselves downward and plant the ground with one layer after another, and so on in this order, so that from a single tree there is formed a long shady canopy like a tent supported by numerous pillars. As regards the size of the trees, he states that their trunks could scarcely be clasped by five men. Aristoboulos also, where he mentions the Akesines and its confluence with the Hyarotis,<sup>2</sup> speaks of trees with branches bent downward, and of such a size that fifty horsemen could be sheltered from the noontide heat under the shade of a single tree. According to Onesikritos, however, four hundred horsemen could be so sheltered.<sup>3</sup> Aristoboulos, mentions another tree which

2. The river now called the Rāvī is called by Arrian and Curtius the Hydraotes, by Ptolemy the Adris or Rhouadis, but by our author the Hyadotis, which makes a nearer approach to its Sanskrit name the Airāvatī. The point of its confluence with the Akesines is now thirty miles above Multan, but in Alexander's time the junction occurred fifteen miles below that city.
3. This tree is the *ficus Indica* (*συκη Ινδικη*) so well known under the name of the banyan tree. It is noticed at length by Lassen, *Ind. Alt.* ii. 255-260. It is mentioned by Theophrastos, *Hist. pl.* I. vii. 3, and iv. iv. 4; Arrian, *Ind. xi*; Pliny vii. 2, 10 and xii. II.

'The fig tree there (in India) has a small fruit. It always plants itself, and spreads out in vast branches the lowest of which are so bent into the earth, that in a year's time they are firmly rooted and make new layers for themselves around the parent stem in a circle as in garden work. Shepherds pass the summer time within this enclosure, which

has large pods, like the bean, ten fingers long and full of honey. Those who ate it did not easily escape with their lives.<sup>4</sup> But in assertions about the size of trees, those writers surpass all others, who affirm that beyond the Hyarotis, a tree was seen which cast a shade at noonday of five stadia. Aristoboulos, speaking of the wool bearing trees says that there is a stone within the flower pod, and that when this is extracted the remainder is combed like wool.<sup>5</sup> (Strabo, XV. i. 21).

### TREES PRODUCING WINE

#### Medicinal plants and roots :

In the country of Mousikanos there grows of itself he says, a kind of grainlike wheat, and also a vine which produces wine in India<sup>1</sup>; on which account,

is both shady and well fenced, and covered completely with a dome of noble appearance, whether you behold it from underneath or from a distance off. The upper boughs of the tree ramify profusely as they shoot up high aloft, while the parent stems are of such vast bulk that in most cases they are sixty paces in circumference, while each has a shade that covers two stadia. The breadth of the leaves is such as to give them the likeness of an Amazonian shield. As these leaves completely cover the fruit, they prevent its growth, and it is rarely any bigger than a bean. Being ripened however through the leaves by the rays of the sun, it has a singularly sweet taste, quite in consonance with the wonderful nature of the tree. It grows chiefly near the river Akesines.<sup>2</sup> Plin. *Nat. Hist.* xii. II.

4. 'Probably the Carouba (*Lotus Zyzypus*), but it does not produce the effect here mentioned.' – Falconer's *Strabo*, iii. 86.
5. A long notice of the wool-bearing trees of India will be found in Lassen's *Ind. Alt.* i. 249–251.
1. Q. Curtius (viii. 9) asserts that wine is much used by all Indians, whereas Megasehenes, who had the best means of knowing, says that they used it only on sacrificial occasions.

according to Anacharsis,<sup>8</sup> they had neither the pipe nor any other musical instruments except cymbals and drums and the rattles used by jugglers. Both Aristoboulos and other writers relate that India produces many medicinal plants and roots, both of salutary and a noxious quality, and plants which yield a great variety

The Brahmans of the Ganges punished intoxication with great severity. The people of the Punjab, on the other hand, were by no means abstemious. The author of the *Periplus* mentions wine as one of the Indian imports.

2. Anacharsis the Skythian, who is sometimes reckoned as one of the seven wise men of antiquity, was the brother of Saulios the King of Thrace, and uncle of the next king that Idan-thyrsos in whose reign the Skythians were invaded by Darius, the son of Hystaspes. He travelled through many countries in pursuit of knowledge, and came to Athens in the days when Solon was occupied with his legislative measures. He knocked, Plutarch tells us, at Solon's door and requested his friendship. Solon answered that friendships are best formed at home. *Then do you, said Anacharsis, who are at home, take me into your house and make me your friend.* The sharp and ready wit of this reply is said to have impressed the great legislator so favourably that he admitted Anacharsis to a share both of his friendship and of his counsels. In Athens his simple mode of life, the shrewdness of his observations, and his acute criticism of Greeks manners and institutions excited much public attention and admiration. After he had returned to his own country he was slain by his brother Saulios, whose wrath had been kindled on finding engaged in celebrating foreign rites — the orgies of Kybele. He is said to have written a work on legislation and the art of war. Several letters ascribed to him are still extant, and one of these is quoted by Cicero in his *Tusculan Disputations* (v. 32). Some of these particulars, besides others, will be found in Herodotos iv. 46, 76, 77; in Plutarch's *Solon*; in Lucian's *Anacharsis and Skytha* and in several passages of Athenaios.

of dyes.<sup>3</sup> He adds that it was ordained by law that if any person discovered a deadly substance, he should be put to death unless he also discovered an antidote. If he discovered one, he was rewarded by the king. India, like Arabia and Ethiopia, produces cinnamon and spikenard and other aromatics. It has a temperature like theirs in respect of the sun's rays, but it surpasses them in having copious supplies of water, whence the atmosphere is humid, and therefore more nutritious and productive, as is equally the case with the land and the water. On this account the land and the water animals in India are found to be of a larger size than they are in other countries. (Strabo, XV. i. 22).

#### Trees bearing wool, Ebony :

Pliny Book XII. 4 (8). In our account of the Seres we have mentioned their trees which bear wool, and have likewise noticed the immense size of the trees of India. One tree peculiar to that country - the ebony tree - has been extolled by Virgil, who teaches us that it grows nowhere else.<sup>1</sup> Herodotus, however, leads us to believe that it was rather a product of Ethiopia, for he informs us that the people of that country paid every third year to the kings of Persia by way of tribute one hundred planks of ebony wood, together with a certain amount of gold and ivory.<sup>2</sup> C. (9). There are two kinds of ebony; the better sort is scarce, and is remarkably free

3. Indigo (the *Indikon Melan* of the *Periplus*, and the *Nili* of Sanskrit) may be specified as one of the principal, for it appears pretty certain that the culture of the indigo plant, and the preparation of the drug, have been practised in India from a very remote period.
1. *Sola India nigrum Fert ebenum - Georg.* ii. 116, 117.
2. See Herod. iii. c. 97.

from knots. It is black and lustrous, and pleases the eye at once without the aid of art. The other sort is produced from a shrub like *cytisus* and is found in all parts of India. C. (10). There is in India, also, a kind of thorn like ebony, but distinguishable from it even by lamplight the moment the fire flashes across it. We shall now describe those trees which excited the admiration of Alexander the Great in his career of conquest when that part of the world was opened up by his arms.

### The Fig-tree :

C. (11). The fig-tree of that country produces but a small fruit. Always propagating itself spontaneously it spreads out far and wide with its vast branches, the ends of which bend downward to the ground to such a degree that in the course of a year they take root again and young daughters grow around the mother-tree circle wise as in ornamental gardening. Within that enclosure, which is over-shadowed and protected by the rampart of stems thrown out by the tree, shepherds are wont to spend the summer; the circuit of overarching boughs presenting a scene of great magnificence whether viewed from a distance or from under the leafy canopy. The higher branches of the tree shoot far up into the sky in multitudinous ramifications from the vast trunk of the parent tree, so that it very often overspreads a circuit of sixty paces, while its shade covers as much as a couple of stadia. The broad leaves have the shape of an Amazonian buckler, and hence the fruit being so much covered by the leaves is stunted in its growth, small in quantity, and never bigger than a bean. The figs, however, being ripened by the rays of the sun piercing through the leaves, are exceedingly luscious and worthy of the marvellous character of the tree which

produces them. These trees are found more particularly in the neighbourhood of the river Acesines.<sup>3</sup>

C. 6 (12). There is a tree still larger which yields a still more luscious fruit — that on which the Indian sages subsist. The leaf, which is three cubits long and two cubits broad resembles the wings of birds. The fruit, which grows on the bark, is remarkable for the wondrous sweetness of its juice, and is so large that one would of itself suffice for four persons. The tree is called the *pala* and its fruit *ariena*.<sup>4</sup> It is found in greatest abundance in the country of the Sydraci, which formed the limit reached by Alexander's expedition. There is besides another tree which resembles this one, though the fruit which it bears is sweeter, and, when eaten, produces severe disorders of the bowels. Alexander published an order forbidding any one in his army touching this fruit.<sup>5</sup>

#### Unnamed trees Olive, pepper etc. :

C. (13). The Macedonians have mentioned various kinds of trees (found in India) but generally without giving their names. There is one which resembles the *terebinth* (turpentine tree) in every respect except the fruit, which is like the almond though it is of a smaller

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3. This tree is the *ficus Indica* (ουκη Ινδικη), so well known under the name of *banyan-tree*. It is noticed at length by Lassen, *Ind. Alt.* ii. 255-260. It is mentioned by Theophrastos, *His. pl.* I. vii. 3, and IV. iv. 4; Arrian, *Ind.* XI.; Pliny VII, 2, 10, and XII. ii.
4. 'Spengel and Baubin are of opinion that the banana is the tree meant here; Dodonaeus thinks it is the pomegranate. Thevet says that the *pala* is the *paquovera* of India the fruit of which is called *pacona*. The account is borrowed from Theophrastus.' —Bohn's Translation, iii. p. 110.
5. Some have taken this to be the tamarind tree — *Tamarindus Indica* — the pulp of which is slightly laxative.

size, and remarkable for its extreme sweetness. It was found chiefly in Bactra, and some persons took it to be a variety of terebinth rather than a tree to which it bore a striking resemblance. As to the tree again from which they make a kind of linen cloth, in leaf it resembles the mulberry tree, while the calyx of the fruit is similar to the dog-rose.<sup>6</sup> It is reared in cultivated grounds, and no other kind of plantation makes such a charming landscape around a country seat.

C. 7 (14). The olive tree in India is sterile, with the exception however of the wild olive. The pepper plant grows everywhere in India, and resembles our junipers in appearance, though some writers assert that they only grow on the slopes of Caucasus, which lie exposed to the sun.<sup>7</sup> The seeds differ from the juniper by their being enclosed in very small pods such as we see in kidney beans. These pods make what is called long pepper, if, before they burst open, they are plucked and then dried in the sun. But when they are allowed to ripen, they gradually split open, and at maturity disclose the white pepper, which then by exposure to the heat of the sun changes its colour and becomes wrinkled. These products, however, are liable to a peculiar disease, for if the weather be bad they are attacked with a

6. 'Fee is of opinion that *cynorrhodeon* here means, not the dog-rose, but the gall which is formed on the tree by the sting of the Cynips bedeguar.' Bohn's Trans.

7. Pepper was in ancient times produced chiefly in those parts of India which adjoin the Malabar coast. The author of the *Periplus of the Erythraean sea* names Tyndis, Muziris, Nēlkynda, and Becare as the ports from which pepper was exported. The ships, he tells us, which frequent these ports, are of a larger size, on account of the great amount and bulkiness of the pepper and betel which form the main part of their cargoes.'

smutty kind of blight, which makes the seeds nothing but rotten empty husks, called *bregma*, a term which in the Indian language signifies *dead*. Of all the kinds of pepper this is the most pungent and the lightest while it is also distinguished by the extreme paleness of its colour. The black kind of pepper is more agreeable to the palate, while the white kind is less pungent than either. The root of this tree is not, as some have supposed, the article called by some writers, *Zimpiberi* while others call it *Zingiberi* (i. e. ginger), although its taste is very similar. For ginger is produced in Arabia and the Troglodyte country,<sup>8</sup> in the cultivated parts being a small plant with a white root. It is liable to decay very quickly, notwithstanding its extreme pungency. The price it fetches is six denarii<sup>9</sup> the pound. Long pepper is very easily adulterated with Alexandrian mustard. It sells at fifteen denarii the pound, the white kind at seven, and the black at four. It is surprising, how it has become such a favourite article of consumption for other substance attract us, some by reason of their sweetness, and others because they are of an inviting appearance, pepper has nothing to recommend it either for fruit or berry, its pungency being the only quality, for which it is esteemed; and yet for this it must be fetched from far away India.... Both pepper and ginger grow wild in their respective countries, and yet here we buy them by weight like gold and silver. Italy too now produces a kind of pepper tree.... but its pepper has not that mature flavour which the Indian sort acquires by its exposure to the sun.

8. The Troglodytes lived along the shores of the Red Sea, both on the Arabian side and on the African. As their name implies, they dwelt in caves. These they found in rocks or made by excavating them.

9. The denarius was equal to 8 pence 3 farthings.

### Caryophyllon :

C (15). There is, moreover, in India a grain similar to pepper, but larger and more brittle, and this is called caryophyllon.<sup>10</sup> The same country produces also on a thorny shrub a grain resembling pepper which is remarkable for its pungency. The leaves of this shrub are small and packed closely together like those of the privet. Its branches, which are three cubits long, are of a pallid colour, while its root is wide spreading and woody, and of the colour of boxwood. From this root, when boiled along with the seed in a copper vessel, is prepared the medicament called *lycion*.<sup>11</sup>

### Lycion :

The Indians send us this preparation in vessels made from the skins of camels or rhinoceroses. Some persons in Greece call the shrub itself the Chironian pyxacanthus, the berbery shrub, or box-thorn.

### Macair :

C 8 (16). Macir also is brought to us from India. It is the red bark of a large root called by the same name as the tree which grows from it. What the tree is like I have not been able to learn. A decoction of this bark with honey is used in medicine as a specific for dysentery.

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10. This is generally taken to be the clove tree, but Fee thinks it may possibly have been the *Myrtus Caryophyllata* of Ceylon, the fruit of which corresponds to the description here given by Pliny.
11. We learn from the *Periplus of the Erythraean Sea* that lycion was exported from Barbarikon, a port at the mouth of the Indus, and from Barygaza (now Bharoch) on the Nerbudda. It is a thorny plant, the juice of which was used for dyeing yellow, while a liquor drawn from it was used as medicine (Celsus, v. 26, 30 and vi. 7).

### Sugar plant :

C. (17). Arabia too produces sugar, but the Indian kind is more esteemed, it is a honey collected in reeds, white like gum, and brittle to the teeth.<sup>12</sup> The largest pieces are of the size of a filbert nut ; it is only used in medicine.

### Shrubs :

C. (18). On the borders of India is a country called Ariane, in which is found a thorny shrub from which a precious tear distils. It resembles the myrrh tree and must be cautiously approached because of its prickles. Here too is produced a poisonous shrub which has a root like a radish, leaves like those of the laurel, and a smell which horses find inviting.<sup>13</sup> Alexander in consequence lost nearly all his cavalry on his first entrance into the country — and the same thing happened to him also in Gedrosia. A thorny shrub has also been mentioned as a product of the same country, having

12. The first writer of the West who mentions this article is Theophrastus the disciple of Aristotle. He called it a sort of honey extracted from reeds. Strabo, citing Nearchos, states that reeds in India yield honey without bees. Aelian mentions a kind of honey expressed from reeds which grew among the Prasii (people of upper Bengal). Seneca (*Epis.* 84) speaks of sugar as a kind of honey found in India on the leaves of reeds, and either exuded from these reeds or dropped as dew upon them. Dioscorides again says that sugar is a sort of concreted honey found upon canes in India and Arabia Felix. Lucan says that the Indians near the Ganges quaff sweet juices from tender reeds. Fee suggests that Pliny here refers to the crystallised sugar found in the bamboo cane. The sugar cane has been cultivated from early times in Arabia Felix. Lucan refers to a sugar in the form of a syrup.

13. Perhaps a poisonous kind of horse - radish.

leaves like those of the laurel, the juice of which if spired into the eye causes blindness in all animals.<sup>14</sup> There is besides a vegetable of a very rank odour, which is full of tiny serpents,<sup>15</sup> the sting of which to a certainty causes instant death.

**Bdellium :**

C. 9 (19). Next to Ariane is Bactriane, which produces the most esteemed kind of bdellium. The tree is of a black colour and of the size of an olive-tree. Its leaf resembles that of the oak, and its fruit that of the wild fig-tree. Bdellium itself is of the nature of a gum. Some call it *brochon*, other *malacha*, others again *maldacon*, but when it is black and rolled into a little ball it is known as *hadrabolon*. This substance ought to be transparent like wax, odoriferous, untuous when crumbled, and bitter to the taste but without being at all acid. When used in sacred rites it is steeped in wine to increase its fragrance. It grows in Arabia and India<sup>16</sup> as well as in Media and Babylon. Some persons call the bdellium which is brought to us by way of Media, *peratic*. It is more brittle than the other kinds, harder in the crust, and more bitter to the taste; the Indian kind is, on the other hand, moister and gummy, and is adulterated by means of the almond nut. The various other kinds are corrupted with the bark of

14. Fee thinks this tree may be the *Excoecaria Agallochum*, the juice of which is so acrid that if spired into the eye it endangers the eyesight.
15. Perhaps the whip-snake, which conceals itself among the foliage of trees and the poison of which is very deadly.
16. Bdellium is the gum of the *Balsamodendron Mukul*, a tree which grows in Sindh, Kathiavar, and the Dissa district. It is used both as an incense and as a cordial medicine. It was exported from Barbarikon on the Indus, and from Barygaza (Bharoch).

*scordastum*, the tree of this name producing a gum which resembles bdellium. The adulterations of perfumes, let it be said once for all, are detected by their smell, by their colour, weight, taste, and by the action of fire. The Bactrian bdellium is dry and shining and has numerous white spots, like finger nails in shape. Besides, it should be of a certain weight than which it ought to be neither heavier nor lighter. The price of bdellium when quite pure is three denarii per pound. C. 22. Their very trees afford clothing for the people of India,

#### **Costus roots :**

C. 12 (25). There is a root and also a leaf which are both very highly prized by the Indians. The root is that of the *costus*; it is burning hot to the taste, and has an exquisite aromatic odour; the shrub is otherwise of no use.<sup>17</sup> In the island of Patale, at the very mouth of the Indus, two kinds of it are found—one black, the other white, and this is the better of the two. The price of this article is five denarii per pound.

#### **Nardus leaf :**

C. 26. Of the leaf, which is that of the *nardus*, it is but proper we should write at greater length, seeing that it holds the first place among unguents. This shrub<sup>18</sup> has a root thick and heavy, but short, black,

17. Costus (Sankrit *Kushtha*) was considered the best of aromatic roots, as nard or spikenard was the best of aromatic plants. It was one of the exports of Barbarikon and of Barygaza. It is the *putchok* which is now exported from Calcutta to China, where it is burned as incense in the temples.

18. The plant from which the ancients extracted the famous nard-oil was that which is called in Sanskrit *jatāmānsi*. It is a species of valerian, and is found in the mountainous parts of India, in Nepal, Bhutan etc.

and brittle notwithstanding that it is unctuous, and has a musty smell like that of the *cyprius*. It has a sharp, acrid taste, and its leaves are small and thickly set together. At the top the nard spreads out into ears, and hence it is celebrated as being doubly dowered—with spikes and ears and with leaves that are both of high value. Another kind which grows in the vicinity of the Ganges is condemned as utterly bad. It is called ozaenitis and has foetid smell. Nard is adulterated with a plant called pseudo—nard which grows every where, and has a leaf unusually thick and broad and a sickly colour inclining to white. It is further adulterated by being mixed with its own root to give it additional weight—a purpose for which gum and the litharage of silver are also employed, and sometimes antimony and cypirus, or at least cypirus bark. Its purity is tested by its lightness, the redness of its colour, the sweetness of its smell, and more particularly the taste, which parches the mouth, while at the same time the flavour is most delicious. The price of spikenard is 100 denarii per pound.

#### Amomum Grape :

C. 28. The grape of the amomum is in common use.<sup>19</sup> It grows on a wild vine which is found in India, or, as others think, on a shrub produced on the mountains which rises to the height of a palm—tree. It is plucked along with the root, and is gently pressed together by the hands, for it very quickly becomes brittle. That kind is most esteemed which has leaves closely resembling those of the pomegranate, being without wrinkles and of a red colour. The second quality is that which is distinguished by the paleness of its colour. An inferior kind has a grassy appearance, and the white is the

19. The learned are all at variance with regard to the identification of this plant.

worst of all. This is its colour when old. The price of the amomum grape is sixty denarii per pound, but when crumbled it sells at forty-nine only.

**Cardamomum :**

C. (29). Similar to these (amomum and amomis), both in name and the nature of the shrub, is cardamomum, the seed of which is of an oblong shape.<sup>20</sup> It is gathered in the same way both in India and Arabia. There are four sorts of it. That which is most esteemed is very green in the colour, unctuous, with sharp angles which make it hard to break; the next quality is of a reddish white tint — the third is shorter and blacker, while the worst is mottled, friable, and has but a faint smell; which ought to be similar to costum when genuine. Cardamum grows also in Media. The price of the best kind is three denarii.

**Olive tree :**

C. 17 (38). In Arabia, too, the olive-tree distils a tear, with which the Indians prepare a medicament called by the Greeks *enhoemon*,<sup>21</sup> and said to be of singular efficacy in cicatrising wounds.

C. 18 (41). At the very lowest computation, India, the Seres, and the Arabian peninsula drain from our empire yearly one hundred million of sesterces; so dearly do we pay for our luxury and our women.

**Luxury preparations :**

C. 22 (48). Scented calamus, also, which grows in Arabia, is common to both India and Syria.<sup>22</sup>

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20. The *cardamum* of modern pharmacy. It is found in India but not in Arabia as here stated.
21. *evapov* 'blood-stanching'.
22. Naturalists are uncertain how this kind of *calamus* is to be identified. It has been taken to be a gramineous plant of the genus *Ahdropogon*, and also to be the Indian *Gentiana chirayta*, called lemon-grass from its scent.

### Marine trees :

Book XIII, C. 25 (51). The officers of Alexander who navigated the Indian seas have left on record a description of a marine tree, the leaves of which are green while in the water, as soon as they are taken out, are dried into salt. They have noticed also bulrushes of stone closely resembling the real, and found along the seashore. They found, besides, certain shrubs in the deep sea of the colour of an ox's horn, which send out numerous branches and are red at the tips. These were brittle, and broke like glass when touched, but in the fire they turned red - hot like iron, though on cooling they resumed their natural colour. In the same regions the tide covers the woods which grow on the islands,<sup>23</sup> though the trees are of a greater height than the tallest planes and poplars. Their leaves, which never fall off, resemble those of the laurel, their flowers those of the violet both in colour and smell, and their berries those of the olive. These berries are of a pleasant fragrance, make their appearance in autumn, and fall from the trees in spring. The smaller trees are entirely covered by the sea. The tops of the tallest stand out of the water, and ships are fastened to them, but when the tide ebbs they are fastened to the roots. We learn from the same authorities that they saw out in the same sea other trees which always retained their leaves and produced a fruit like the lupine.

### Palm tree :

Book XIV. C. 16 (19). The fruit of the palm is employed for this purpose (making wine) by the Parthians

23. The reference is probably to mangrove swamps. What is said with regard to the height of the trees is altogether absurd. The account here given of the flora of the Makran coast was probably taken by Pliny from Onesikritos, the

as well as the Indians, and indeed throughout all the countries of the East.<sup>24</sup>

**Extracting oils :**

Book XV. C. 7 (7). The Indians are said to extract oils from the chestnut, sesamum, and rice, and the Ichthyophagi from fish.

**Ivy :**

Book XVI. C. 34 (62). Ivy is now said to grow in Asia. Theophrastus has denied this, and says it grows nowhere in India, except on Mount Meros... and that Alexander on account of its rarity had himself crowned with it, after the example of Father Bacchus, on his victorious return, from India with his army.

C. 37 (65). If a person should carefully enumerate the Ethiopians, Egyptians, Arabians, Indians, Scythians, Bactrians, Sarmatians, and all the eastern nations comprehended in the vast empire of the Parthians, he would find that quite one-half of the human race throughout the whole world live in dominions which have been subjugated by the arrow... The Indian reeds are preferred to all others. Some think, however, these reeds are of a different nature from those produced elsewhere, since by adding a point to them the Indians can use them as lances.

**Indian reed :**

The Indian reed, in point of fact, attains the thickness of a tree, if we may judge from the specimens seen everywhere in our temples. The Indians tell us that in these plants also the distinction of male and female obtains, the body of the male being more compact,

pilot of the fleet which under Nearchos sailed from the mouth of the Indus to the head of the Persian Gulf.

24. This liquor is made from the fermented sap called in India tāri. It is the juice of the palmyra tree vulgarly called toddy.

and that of the female of greater amplitude. A single section moreover, between two joints is large enough, if we take their word for it, to make a canoe. These reeds are found more particularly on the banks of the river Acesines. The Indian reed stands alone in having short leaves.

**Sesame :**

Book XVIII. C. 10 (22). Sesame comes from India, where they extract an oil from it.<sup>25</sup> The grain is of a white colour.

**Wild barley and rice plant :**

C. 13. In India there is both a cultivated and a wild barley, from which they make excellent bread as well as a kind of pottage. But their favourite diet is rice, from which a ptisan is prepared like that which is elsewhere made from barley. The leaves of the rice-plant are fleshy, and similar to those of the leek but broader; the plant itself is a cubit in height, the blossom is purple, and the root is round like a pearl.

Book XIX. C. 1 (2). The Ethiopians and the Indians prepare a kind of thread from a fruit which resembles our apple.

**Lycium :**

Book XXIV. C. 14 (77). The best lycium is said to be that prepared from the thorn of the same name, called also the Chironian pyxacanthus, and already mentioned by us when speaking of the trees of India, the country which produces what is considered far the best lycium... The Indian lycium differs from the other kinds in colour, the lump being black on the outside, red within, but quickly turning black when broken. It is bitter and remarkably astringent.<sup>26</sup>

25. This oil is used for food, for medicinal purposes, and as a cosmetic.

26. Lycium is mentioned in the *Periplus of the Erythraean Sea* among the articles exported from Barbarikon, a mart in the

### Achaemenis :

C. 17 (102). The Achaemenis, he (Democritus) says, grows in the country of the Tradastili, an Indian race. It is a plant of the colour of amber and leafless. The root of it, if divided into lozenges and taken in wine in the daytime, racks the guilty during the night with such varied visions of avenging deities that they confess all their crimes. He calls it also *hippophobas*, because it is an object of especial dread to mares.<sup>27</sup> ... The thalassaegle,<sup>28</sup> he says, is found on the banks of the river Indus, and is, on that account, also called the *potomangis*. If taken in drink it produces a delirium in which the wildest fantasies whirl through the brain.

Delta of the Indus, and from Barygaza (now Baroch) on the Nerbudda. It was found principally in Lycia, and hence its name. Its juice was used for dyeing yellow, and a liquor was drawn from it which was used medicinally. Lycium is known in India as *ruzot*, an extract of the *Berberis Lycium* and *Berberis Aristata*, which both grow on the Himalayas.

27. 'So called from Achaemenes, the ancestor of the Persian kings. Fee thinks that it was a variety of the *Euphorbia antiquorum* or else a nightshade' (Bohn's *Pliny*). Pliny subsequently mentions that a magical virtue was attributed to the Achaemenis by Asclepiades, who came to Rome as a professor of rhetoric in the time of Pompey the Great, but turned his attention to medicine, in the practice of which he departed from the method in vogue and followed one devised by himself. He said that if this plant were thrown into the ranks of the enemy it would be certain to create a panic and put them to flight.

28. The word means '*The brightness of the sea.*' For the other name, *potamangis*. Hardouin has suggested *potamitis*, river-plant.' Fee takes it to be a narcotic plant, probably a nightshade. Falconer says it is not impossible that there may be here an illusion to the effects of opium.

## CHAPTER V

### POLITICAL INFORMATION

A greater part of Asia was explored under the direction of Darius. He being desirous to know in what part the Indus, which is the second river that produces crocodiles, discharges itself into the sea, sent in ships both others on whom he could rely to make a true report and also Scylax of Caryanda.<sup>1</sup> They accordingly setting out from the city of Carpatyrus and the country of Paktyice,<sup>2</sup> sailed down the river towards the east and sunrise to the sea;<sup>3</sup> the sailing on the westward, they arrived in the thirtieth month at that place where the King of Egypt despatched the Phoenicians, whom I before mentioned, to sail round Libya. After these persons had sailed round, Darius subdued the Indians and frequented this sea. (Hero. Book IV. 44).

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1. Karyanda was a city of Karia on the coast, not far from Halikarnassos, of which Herodotus was a native. As Sylax was the fellow-countryman of the historian there seems little, if any, ground for doubting, as some have done whether this voyage was actually made.
2. Dr. M. A. Stein (in his *Memoir on Maps illustrating the Ancient Geography of Kas'mir*, 1899) identifies the land of Paktyike with the territory of Gandhara, the present Peshawar District. While thinking it unlikely that the exact site of Kaspatyros will ever be identified, he suggests that the expedition of Skylax may have started from some point near Jahangira, a place on the Kabul river some six miles distant from its junction with the Indus. Paktyike is probably now represented by the ethnic name *Pakhtun* or the Indian *Pathan*. Dr. Stein rejects the idea that Kaspatyros or Kaspapyros was ever taken to designate Kashmir.
3. The Indus, however, after emerging from the mountains holds its course southward.

### Contradictory notices :

I must ask the reader to receive my description of this country with some indulgence, for it lies at a great distance off, and not many persons of our nation have seen it; such as have visited its shores have seen a part of it only, and their accounts consist chiefly of what they heard from report. What they did see came under their notice while the army in which they served marched in haste through the country. Hence they give us conflicting accounts of the very same things, though they write about them as if they had very carefully examined them. Some of these writers were fellow soldiers, who lived together in close intimacy as serving together in the army with which Alexander conquered Asia. Yet they frequently contradict each other. But when they differ so widely in describing what they actually saw, what must we think of what they relate from report. (Strabo, XV. i. 2).

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### Baktrian Revolt and Indian invasion :

Nor do those writers who many ages after Alexander wrote about these countries nor those who in these days make voyages thither give any precise information. Thus Apollodoros who wrote the history of Parthia,<sup>1</sup> when he mentions the Greek who made Baktriane revolt from the Syrian Kings, who succeeded Seleukos Nikator,<sup>2</sup>

1. Apollodoros was a native of Artemita, a town in Babylonia. It is not known when he lived. His work on Parthian history is several times quoted by Strabo and once by Athenaios and is also mentioned by Stephanos of Byzantium.
2. Seleukos Nikator accompanied Alexander on his Asiatic expedition, and distinguished himself particularly in the Indian campaigns. In the second partition of the empire the rich and important province of Babylonia fell to his share.

informs us that when they waxed strong these Greeks invaded India. He adds nothing to what was previously known, but even contradicts it when he asserts that the Baktrians<sup>3</sup> had subjected to their rule a greater portion

He was for a time dispossessed of it by Antigonos, to whose dictation he had refused to submit, but in 312 B. C. he recovered Babylon from his ambitious rival, and thus laid the foundations of the Syrian monarchy. He afterwards reduced to his power Sousiana and Media and all the eastern dominions conquered by Alexander from the Euphrates to the banks of the Oxus and the Indus. In 306 B. C. he informly assumed the regal title and diadem. He then undertook an expedition into India with a view to recover the Macedonian provinces in that country which had been seized by Sandrokottos (Chandragupta) a few years after Alexander's death. No incidents of the war between these two mighty potentates have been recorded. We only know that the hostilities were terminated by a treaty, in virtue of which Seleukos surrendered to the Indian King all the Macedonian conquests in India as well as those to the west of the Indus as far as the Paropanisos range, in exchange for 500 elephants. Seleukos appears to have energetically pursued throughout his reign the policy which Alexander had formed for the Hellenization of his Asiatic empire. In the year 280 B. C. he crossed the Hellespont to possess himself of the throne of Macedonia which had fallen vacant by the death of Lysimachos, but he was soon afterwards assassinated by Ptolemy Keraunos. He had then reigned for thirty two years and reached his 78th year.

3. Baktria was conquered by Seleukos Nikator, who made it a dependency of the Syrian kingdom which he had founded. It was wrested from the third prince of his line about 256 B. C. by Antiochos Theos or Theodotos who raised the province to the rank of an independent kingdom. His successors extended their authority over the valley of the Indus and southward along the coast as far as the mouth of the Narbada. The names of the kings who belonged to this

of India than the Macedonians; seeing that Eukratidas<sup>4</sup> had

warlike dynasty have been recovered from their coins, of which great numbers have been found. Their empire after subsisting for about 130 years, was invaded and conquered by hordes of the Sakai, who, as Strabo tells us (xi. viii. 2) came from beyond the Jaxartes, and were called respectively the Asioi, Pasianoi, Tocharoi, and Sakarauloi (Sara-kaul-of). These Sakai yielded in their turn barbarians of their own type, and their king Kanishka, in our author's own days, extended his authority from Baktria to Kashmir and from the Oxus to Surashtra. Apollodoros was therefore correct in his assertion that the Baktrians had subjected to their power a larger portion of India than the Macedonians. Strabo quotes from this author another passage which runs to the same effect (xi. xi. 2): 'The Greeks who effected the revolt of Baktra became so powerful in consequence of its fertility and other advantages, that they became masters of India and Ariana. Their chiefs, especially Menandros, if he really crossed the Hypanis (Beas) to the east and reached Isamos (Jomanes or Jumna R.) conquered more nations than Alexander.'

4. Eukratidas ascended the throne of Baktria in the year 181 B. C. The history of his reign is involved in great obscurity and confusion. Justin (xii. 6) briefly notices his career 'Two great man,' he says 'Mithridates and Eucratidas, began to reign almost simultaneously, the one over the Parthians and the other over Bactra. Fortune was more propitious to the Parthians under their king, who conducted them to supreme power, while the Bactrians on the other hand were so harassed by various wars, that they lost not only their sway but even their liberty. For when they had been broken by the wars which they had waged with the Sogdians, the Drangians and the Indians, they at least feebly succumbed to the once weaker power of the Parthians. Eucratidas nevertheless engaged in many wars which he prosecuted with great energy. He was besieged by Demetrius the King of the Indians, but though he had by this time been worn down by his wars, he made incessant sallies with 300 soldiers upon the besiegers and defeated them, although they were

a thousand cities which acknowledged his authority. But we know from previous writers that the Macedonians conquered nine nations situated between the Hydaspes and the Hypanis,<sup>5</sup> and possessed 5000 cities, not one of which was less than Kos Meropis,<sup>6</sup> and that Alexander after having reduced all this country delivered it over to Poros. (Straba, XV. i. 3 ).

60,000 strong. Having been thus in the fifth month liberated from the seize, he made India subject to his power. When he was returning thence, he was assassinated on the way by his son, whom he had made the partner of his throne, and who, so far from pretending innocence of the patricide, drove his chariot through his father's blood, and ordered his body to be thrown away without sepulture, as if he had been a public enemy.' The Demetrius here mentioned by Justin was the son of Euthydemos, who made Baktria for the first time a powerful kingdom. He seems to have succeeded his father, and to have reigned over Baktria for ten years. It is supposed that Eukratidas then revolted from him while he was occupied with his wars in India, and succeeded in establishing his authority over Baktria Proper, while Demetrius retained the regions to the south of the Indian Kaukasos. The date of his death is uncertain. Lassen places it in 160 B. C., but others thirteen years later. His coins have been found in great numbers both to the north and to the south of the Paropanisos.

5. The Hydaspes is now the Jehlum or river of Behat. By the natives of Kas'mir it is called the *Bedasta*, which represents its Sanskrit name, the *Vitasta*, Ptolemy alone of all the classical authors calls it the *Bidaspes*. The Hypanis is generally called in the classics the *Hyphasis*. It is the *Vipās'a* of Sanskrit, now called the Beas, and is the river which marked the limit of Alexander's advance eastward into India. It is a tributary of the *Śatadru* or *Satlej*.
6. Meropis was one of the earlier names of the island of Kos or Stanco.

## Indian emissaries to Rome :

The merchants of the present day who sail from Egypt to India by the Nile and the Arabian Gulf have seldom made a voyage as far as the Ganges. They are ignorant men and unqualified for writing an account of the places they have visited. From one place in India and from one king, Pandion,<sup>1</sup> but according to other writers, Poros,<sup>2</sup> there came to Caesar Augustus gifts and an embassy accompanied by the Indian Sophist

1. The kingdom of Pandion, which was situated on the southern extremity of the Indian peninsula, was found by an Aryan race whose ancestors had occupied the regions watered by the Jamnā. This may be inferred both from the name of the king and that of his capital. Which was called *Madura* after the celebrated city which adorned of old, as it does still, the banks of that great tributary of the Ganges. The kingdom is mentioned by Pliny, by the author of the *Periplus of the Erythraean Sea*, and by Ptolemy. The name *Pandion* is derived from the Sanskrit *Pandu*, the name of the father of the five Pandava brothers who are such conspicuous figures in Indian epic poetry. Pliny mentions a *gens Pandae* as the only one in India which was ruled by female sovereigns. This branch of the race seems to have occupied a considerable portion of the basin of the river Chambal, a great tributary of the Jamnā.
2. Three princes of this name are mentioned in the classics :—  
(1) The great Poros who was defeated by Alexander on the banks of the Hydaspes ; (2) a contemporary Poros, a kinsman of the former and sovereign of a district situated to the east of the Hydraotes (Ravi) ; (3) the Poros here mentioned, whom Strabo notices again at more length in his last chapter on India. These princes, as their name shows, were descendants of Puru, and thus belonged to one of the most illustrious families in Indian story—that from which sprung the first kings of the Lunar Dynasty which swayed the extensive regions included between the Jamna and the Upper Ganges.

who committed himself to the flames at Athens,<sup>3</sup> like Kalanos, who had exhibited a similar spectacle in presence of Alexander.<sup>4</sup> (Strabo, XV. i. 4).

### Semiramis and Cyrus, their sufferings :

If, then, we set aside these accounts and turn to those which were current before Alexander's expedition, we shall find them to be still more obscure. It is probable that Alexander believed these stories from the vanity with which his wonderful successes had inspired him. Thus Nearchos<sup>1</sup> tells us that he was ambitious to

3. For further particulars regarding the Gymnosophist, see Strabo, XV. I. 65-66.
4. Frequent mention is made of Kalanos from the 61st to the 68th chapter of this book. The manner in which he immolated himself is described by several classical authors, as Arrian, vii. 3; Plutarch, *Life of Alexander* c. 69; Lucian, *De Morte Peregrini*, c. 25; Diodoros Sic. xvii. 107. From Lucia we learn that Nearchos was present at the sacrifice, which must therefore have taken place at Sousa, and not at Persepolis as stated by some writers.
1. Nearchos was a native of Crete, but settled at Amphipolis. He was brought up at the Macedonian court, where he was educated along with Alexander, who conceived for him an affection and esteem which time but served to confirm and deepen. He accompanied his master into India, where he rendered important services as admiral of the fleet, which had been constructed on the banks of the Hydaspes, and which conducted in safety to the mouth of the Indus and thence to the head of the Persian Gulf. He committed to writing his Indian experiences and the incidents of the great voyage which has made his name for ever memorable. His memoirs have been lost, but their contents have been in great measure preserved in the works of Strabo and Arrian. In the division of the provinces made after Alexander's death he received the government of Lykia and Pamphylia, which he was content to hold in subordination to Antigonos. The time on his

conduct his army through Gedrosia because he learned that Semiramis and Cyrus had each led an expedition against the Indians (through that country),<sup>8</sup> but that they had both been forced to retreat, the former escaping with twenty men and Cyrus with only seven; for he thought it would be a glorious achievement if he led his victorious army in safety through those countries and nations where Semiramis and Cyrus had suffered such great disasters. He then no doubt believed the stories. (Strabo, XV. i. 5).

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- death is not known, but he is mentioned for the last time in history in the year 314 B. C.

2. The invasions of India by Semiramis and Cyrus are as mythical as those which had been ascribed to Dionysos and Herakles. An account of the Assyrian invasion will be found in Diodoros (ii. 16. 20), who excerpted it from the *Assyriaka* of Ktesias, the Knidian. Semiramis, it is there stated, started on her Indian expedition from Baktra, and on reaching the Indus, defeated Stabrobates the Indian King in a naval engagement fought upon that river. She was less successful, however, when fighting on land and was eventually compelled to return to Baktra after losing two thirds of her vast army. It has been supposed that the form of the legend as it appears in Diodoros was not taken direct from Ktesias, but Kleitarchos, who accompanied Alexander into India, and modified the narrative of Ktesias to harmonise it with his better knowledge of the country. Duncker is of opinion that Ktesias derived his information from some Median story which celebrated the fall of Assyria before the Median arms, but the story is of purely mythic origin. Ktesias, who was a contemporary of Xenophon, lived for a number of years in Persia at the court of Artaxerxes Mnemon. Semiramis appears to have flourished in the eighth century B. C. The Assyrians extended their conquests into Ariana, but neither they nor the Persians under Cyrus penetrated into India. The first invasion of India by the latter people was made in the days of Darius Hystaspes.

## Approach by Sesostris and Tearkon:

How can any just confidence be placed in the accounts of India derived from such an expedition as that of Cyrus or that of Semiramis? The same view is taken by Megasthenes, who enjoins us to put no faith in the ancient histories of India. No army, he says, was ever sent beyond their borders by the Indians, nor did any foreign army ever enter and conquer their country except the expeditions of Herakles and Dionysos and the later invasion of the Macedonians. Yet Sesostris the Egyptian<sup>1</sup> and Tearcon the Ethiopian advanced as far as Europe, and Nabokodrosoros,<sup>2</sup> who is more famous among the Chaldaeans than Herakles (among

1. Sesostris has been generally identified with Ramses the Great, the third king of the nineteenth dynasty, and the father of Menephthah, the Pharaoh who oppressed the Israelites. Lepsius has however identified him with the Sesortasen or Osirtasen of the great twelfth dynasty. According to Greek writers Sesostris extended his conquests to all parts of the world, even to the land of the Ganges and to Skythia. They seem indeed to have united in ascribing to him all the great deeds of the Pharaohs. Thus Diodoros, who calls him Sysoosis, says that he conquered the Ethiopians and made them tributary — that he then sent forth a fleet of 400 ships into the Red Sea, by the help of which he gained all its islands and subdued the neighbouring nations as far as to India, while he himself marching by land conquered all Asia, for he not only invaded all those nations which Alexander the Macedonian afterwards subdued, but even others whose territories he did not enter, for he both passed over the river Ganges and likewise pierced through all India to the main ocean and then subdued the Skythians as far as the Tanais which divides Europe from Asia — Book i. c. 4.
2. This is the Nebuchadnezzar of Scripture. The native form of his name is Nabu - kuduri - utsuri, and in the Behistun inscription the form is Nebukudrachara

the Greeks), marched to the Pillars,<sup>3</sup> which Tearkon also reached, he who led his army from Ibera to Thrace and the Pontos. Idanthyrsos again, the Skythian,<sup>4</sup> overran Asia as far as Egypt; but none of all these conquerors approached India, and Semiramis died before her enterprise was undertaken. The Persians did indeed summon the Hydrakai<sup>5</sup> to attend them as mercenaries,

3. These are not the Pillars of Hercules, but those called by Ptolemy the Pillars of Alexander. These are situated above Albania and Iberia on the borders of Asiatic Sarmatia. The line of march followed by Sesostris led him to Palestine, Syria, Mesopotamia, Armenia, Iberia and Kolchis. See Falconer's *Strabo*, iii. p. 75, note also the *Annals* of Tacitus, ii. 60.
4. According to Justin (ii. 3) the Skythian invasion of Egypt was frustrated by the swamps on its borders. He adds that the Skythians occupied fifteen years in the reduction of Asia, on which they imposed a moderate tribute. Herodotus (i. 103-106) mentions an invasion of Asia by Skythians under a king called Madyes. As Idianthyrsos may have been a common appellative of the Skythian Kings, Strabo may be here referring to that invasion.
5. The Hydrakes are generally called the Oxydrakai. 'It has been thought,' says Bunbury, 'that a trace of their name may be found in that of Ooch, a city situated just below the junction of the Sutledge with the Chenab. Very little reliance can be placed on this etymology; but the position thus suggested would accord well with the narrative of Arrian, and on the whole it seems not improbable that the Oxydracae may have occupied the district of Ooch together with the adjoining province of Bahawulpoor.' Arrian, however, in his *Indika* (c. iv) places them on the Hydaspes above its confluence with the Akesines, and if this was their real position they must have been situated to the north of the Malloi. They have been identified with the Sudras, a tribe of aborigines, or, at all events, of non-Aryan origin. The final *και* in the Greek form of their name is a common Sanskrit

but they did not invade India, but only approached its frontiers when Cyrus marched against the Massagetai.<sup>6</sup> (Strabo, XV. i. 6).

### Stories of Herakles and Dionysos :

Megasthenes and a few others think the stories of Herakles and Dionysos credible, but most writers, and among them Eratosthenes, regard them as incredible and fabulous like the Grecian stories. In the *Bacchai* of Euripides, for instance, Dionysos uses this bombast:<sup>1</sup> and having left the lands abounding in gold of the Lydians and Phrygians and the sun—parched plains of the Persians and the Baktrian walls; and having come over the frozen land of the Medes and the happy Arabia and all Asia.' (Strabo, xv. i. 7).

suffix to ethnic names. They are called the Sydraceae by Pliny (xii. 6).

6. Strabo (xi. viii. 2) indicates the geographical position of the Massagetai thus: 'Most of the Skythians, beginning from the Kaspian Sea, are called Dahai Skythai, and those situated more towards the east Massagetai and Sakai; the rest have the common appellation of Skythians but each separate tribe has its peculiar name, and all, or the greater part of them, are nomads.' Herodotos (i. 201) had written to the same effect, adding that the Massagetai dwelt beyond the river Araxes over against the Issedonians. He winds up the first book of his *History* with an account of the war waged by Cyrus against this people and their gallant leader, Queen Tomyris. In the battle which terminated the war Cyrus was defeated and slain. The ethnic affinities of the Massagetai are uncertain. Some, as Rawlinson, judging from the latter half of their name, take them to be a Gothic race, while others would assign them a Mongolian origin. Some of their customs, as described both by Herodotos (*loc. cit.*) and by our author (xi. viii. 6, 7), who here copies him, were extremely barbarous.

1. See the *Bacchæ*, 1. 13.

In Sophokles again a person appears singing the praises of Nysa<sup>2</sup> as a mountain consecrated to Dionysos: 'Whence I beheld the renowned Nysa, the haunt of the Bacchanals, which the horned Iacchos<sup>3</sup> has made his most beloved seat, where is heard the scream of no bird,' and so forth.

The poet (Homer) speaks of Lykourgos the Edonian<sup>4</sup> thus: 'Who formerly chased the nurses of the infuriated Dionysos along the holy mountain of Nysa.' So much

2. Many places bore the name of Nysa. That of which Sophokles here speaks cannot be the Indian Nysa, which did not become known to the Greeks till Alexander's expedition, which was made more than a century after the poet's death.
3. Iacchos was the solemn name of the mystic Bacchos at Eleusis. Diodoros (iii. 72) explains how he came by his horns: 'It is reported that Ammon was portrayed with a ram's head because he always wore a helmet of that shape in his wars. Some report that he had horns naturally growing out at his temples; and hence his son Dionysos is represented in the same manner, and men of later times hand this down as a most certain truth.' The Egyptian Osiris is sometimes identified with Dionysos.
4. The Edorians were a Thracian people settled along the river Strymon. The legend of the persecution of Dionysos by Lykourgos and the punishment inflicted on the latter for the impious outrage will be found in the sixth book of the *Iliad*, 130-140. The story as there given has been much varied by later poets and other writers.

The Indian Nysa may perhaps be the city which in Ptolemy's *Geography* is called Nagar or Dionysopolis. If so, it must have been situated in the valley of the Kabul river, four or five miles to the west of Jalalabad. Colonel Holdich places the Nysaeans on the 'well watered slopes of those mountains which crown the uplands of Swat and Bajour, where they cultivated the vine for generations.' The vine grows in some parts of India as far south as Patna.

regarding Dionysos. But with regard to Herakles, some relate that he penetrated only to the opposite extremities of the west, but others assert that he advanced both ways ( both to the west and the east). ( Strabo, XV. i. 7).

### Their Descendants :

From such like stories they gave the name of Nysaians to some nation or other, and called their city Nysa, ascribing its foundation to Dionysos, and the hill above their city they called Meros, assigning as the reason for giving these names that the ivy and vine grew there, although the latter trees does not produce perfect fruit, for the bunches of grapes fall off on account of the excessive rains before they become ripe. The Oxydrakai are, they say, the descendants of Dionysos, because the vine grows in their country and because they display great pomp in their processions, for their kings set out on their military expeditions in the Bacchic manner and on other occasions issue from the palace flaunting in flowered robes and attended with musicians beating drums — a custom which prevails among other Indians. When Alexander at the first assault had captured a rock called Aornos,<sup>1</sup> the foot of which is washed

1. In my work on *Alexander's Invasion of India* I have examined the various conflicting theories regarding the identification of this celebrated rock, and adopted the theory of General Abbott that Aornos was that part of Mount Mahaban which abuts on the western bank of the Indus. Dr. Bellew in his work on the ethnography of Afghanistan suggests that the Greek name of the rock, *Aornos* is a transformation of the native word *Aranai*, which, he says, is a common Hindi name for hill — ridges in that part of the country, adding that there is an *aranai* spur of Mahaban, near Charorai, in the Chamla valley. He seems to identify the rock with the modern *Malika*, near the summit of Mahaban, the stronghold

by the Indus near its source,<sup>2</sup> the Macedonians magnified the achievement declaring that Herakles had thrice assailed the rock and been thrice repulsed. The Sibai,<sup>3</sup> it is said, were the descendants of the men who had accompanied Herakles in his expedition. They had preserved tokens of their descent, for they wore skins like Herakles and carried the club, and had the figure of a club branded on their oxen and mules. They confirmed this fable by the story about the Kaukasos and Prometheus, for they transferred the tale thither from Pontos on the slight pretext of their having seen a sacred cave among the Paropamisadai.<sup>4</sup> They asserted that this was the prison of Prometheus, that Herakles

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in recent years of the Wahabi fanatics of Hindustan, at the destruction of which he was himself present at the close of the Ambela campaign of 1863-64.

2. The Indus rises in Tibet, near the sources of the Satlej on on the north side of Mount Kailasa. The ancients, however, supposed that it had its sources in the mountain gorges, whence it issues into the Indian plains at a distance of some seventy miles above Attack. By the time it reaches these gorges it has described a course of about eight hundred miles, and has a course still before it of, upwards of a thousand.
3. The territories of the Sibai were situated to the west of the Akesines, below its junction with the Hydaspes. What is here stated regarding this people is repeated by Arrian in his *Indica* (c. v) by Curtius (ix. 4), who calls them the Sobii, and by Diodoros (xvii. 96). Their name as Bohlen points out, indicates that they worshipped Šiva.
4. The Paropamisadai are more correctly denominated by Ptolemy the Paropanisadai. The tribes comprised under this name were located along the southern and eastern sides of the Hindu kush, and thus occupied Kabulistan and a considerable part of Afghanistan. Some have supposed that the caves here mentioned were those of Bamian, but Abbott has suggested a different identification.

came thither for the deliverance of Prometheus, and that this was the Kaukasos<sup>5</sup> which the Greeks represented to be the prison of Prometheus. (Strabo, XV. i. 8). **Stories Incredible :**

That these are the inventions of the flatterers of Alexander is evident, first because the writers do not agree with each other, for while some speak of these things, others make no mention of them at all. For it is not probable that deeds so glorious and well adapted to foster pride were not ascertained, and if ascertained, were not thought worth mentioning, especially by writers of the highest credit. It is evident next from the fact that the intervening nations through which the expeditions of Dionysos and Herakles must have passed on their way to India have no proof to show of their passage through their territories. Besides, the dress worn by Herakles of the nature mentioned is much later than the Trojan record, being the invention of those who composed the *Herakleia*, whether the author of this work was Peisander<sup>1</sup> or some one else. The old

5. The Macedonians transferred the name of the Kaukasus situated between the Euxine Sea and the Kaspian to the Indian Mountains either because they thought that the one range was really connected with the other, or because the Indians gave then, as they do now, the name of *Kho*, which signifies white, to the great chain of mountains covered with snow from which the Indus and its main tributaries descend. See Falconer's *Strabo*, iii. 77, note 3.

1. Peisander, a native of Kameiros, in the island of Rhodes, flourished about the middle of the seventh century B. C. His poem, which, as its name indicates, celebrated the exploits of Herakles, consisted of two books, of which only a few lines have been preserved. In this poem Herakles was for the first time represented as armed with a club, and covered with the lion's skin instead of the usual armour of the heroic period.

wooden statues do not represent Herakles in that attire. (Strabo, XV. i. 9).

We ought therefore in such circumstances to receive everything that makes the nearest approach to probability. I have already to the best of my ability discussed this question in the introduction to this work<sup>1</sup> and I shall now at once make use of what was then settled and add other particulars which may serve to elucidate the subject. From the former discussion it appeared that the views set forth by Eratosthenes in the third book of his *Geography*, in a summary concerning the country regarded as India at the time of its invasion by Alexander, are the most credible of all. At that period the Indus formed the boundary between India and Ariane, which lay immediately to the west,<sup>2</sup> and was subject to the Persians; for in later times the Indians occupied a great part of Ariane which they received from the Macedonians.<sup>3</sup> (Strabo, XV. i. 10).

1. Book II. i. 2.
2. That India was limited to the eastern side of the Indus was the view generally held in antiquity, and that which was favoured by the Hindus themselves. The name was, however, sometimes extended to comprise the regions lying between that river and the great mountain ranges of the Hindu Kush and Paropanisos (See *Pliny*, vi. 23). This extension of the name seems to be justified when we consider that in many cases the names of the tribes, mountains, and rivers of Northern Afghanistan, as we find them given in the historians of Alexander and in Ptolemy's *Geography* were of Sanskrit origin, and that this region was at one time more or less fully occupied by Aryan settlers, who thence diffused themselves over the Punjab and other parts of India. This subject is discussed at length in Elphinstone's, *History of India*, pp. 331-36, and also by V. de Saint-Martin, *Etude*, pp. 9-14.
3. Strabo here refers to the occasion made by Seleukos Nikator to Sandrokottos of the provinces to westward of the Indus—

## The Indian King and His Bodyguards:

The care of the King's person is entrusted to women, who also are bought from their parents.<sup>1</sup> The bodyguards and the rest of the soldiery are posted outside the gates. A woman who kills a king when drunk is rewarded by becoming the wife of his successor. The sons succeed the father. The king may not sleep during the daytime, and at night he is obliged to change his couch from time to time to defeat plots against his life. The king leaves his palace not only in time of war, but when he has to sit in court to try causes. He remains there for the whole day without allowing the business to be interrupted, even though the time arrives for attending to his person. This attention consists in the friction of his person with cylinders of wood. He continues hearing cases while the friction, which is performed by four attendants, is still proceeding.<sup>2</sup> Another purpose for which he leaves his palace is to offer sacrifice; a third is to go to the chase, and this in a sort of bacchanalian fashion. Crowds of women surround him, and on the outside are spearmen. The road is marked off with ropes, and it is death for a man or even for a

a matter to which he subsequently refers in his description of Ariana, sec. 9.

1. From Curtius we learn that the food eaten by the king was prepared by women. Women also, he adds, served him with wine, and when he fell into a drunken sleep carried him away to his bedchamber, while invoking the gods of the night in their native hymns (viii. 9).
2. Curtius represents the king as so engaged within the palace: 'The palace', he says (viii. 9), is open to all comers, even when the king is having his hair combed and dressed. It is then that he gives audience to ambassadors and administers justice to his subjects. His slippers are after this taken off and his feet are rubbed with scented ointments.'

according to the custom of his country, lies here. (Strabo, XV. i. 73).

pointed out that the Indian embassy to Augustus is mentioned by Suetonius in his life of that emperor c. 21 in these terms 'The Indians also and Scythians, who were known only by report, he attracted to solicit voluntarily through ambassadors, the friendship of himself and the Roman people.'

Florus also, towards the close of his *Epitome of Roman History*, mentions the same embassy:-

'For both the Scythians and Sarmatians sent ambassadors begging our alliance. The Seres also and the Indians who live under the Sun, together with jewels and precious stones, bringing elephants also amongst their presents, reckoned nothing so much an obligation laid upon the Emperor, as the length of their journey, which they had finished in four years, and notwithstanding the complexion of the men showed that they came from another climate.'

Orosius, a native of Tarraco (Tarragona), states in his *History* (vi. 12) that an Indian embassy reached Augustus at the time when he was residing in that city. As the date of this embassy does not tally with that noticed by Nicholaos, some have supposed that there were two different embassies, but this is highly improbable. Orosius is by no means an accurate historian.

Dion Cassius (ix. 58) also mentions this Indian embassy in these terms:-

'Numerous embassies came to him (Augustus at Samos, B. C. 21) and the Indians having first proclaimed a league of amity with him, obtained its ratification and presented him, besides other gifts, with tigers also animals seen then for the first time by the Romans, and, if I mistake not, even by the Greeks. They gave him also a stripling without arms (like the statues we see of Hermes), but as dexterous in using his feet as others their hands, for with them he could bend a bow, hurl a dart, and put a trumpet to his mouth. One of the Indians, Zarmaros, perhaps to make a show for the Athenians and Augustus who was then in Athens, resolved

### The Indian Palace at Pataliputra :

In the Indian royal palace where the greatest of all the kings of the country resides, besides much else which is calculated to excite admiration, and with which neither Memnonian Susa with all its costly splendour nor Ecbatana with all its magnificence can vie (for, methinks, only the well-known vanity of the Persians could prompt such a comparison), there are other wonders besides, which I cannot undertake to describe in this treatise. In the parks tame peacocks are kept, and pheasants which have been domesticated; and among cultivated plants there are some to which the king's servants attend with special care, for there are shady groves and pasture-grounds planted with trees, and branches of trees which the art of the woodsman has deftly interwoven. And these very trees, from the unusual benignity of the climate, are ever in bloom, and, untouched by age, never shed their leaves; and while some are native to the soil, others are with circumspect care brought from other parts, and with their beauty enhance the charms of the landscape. The olive is not of the number, this being a tree which is neither indigenous to India, nor thrives when transported thither. Birds and other animals that wander at freedom and

to put an end to his life. And having been initiated in the mysteries of the two gods (Demeter and Persephone) which were held out of the ordinary course on account of the initiation of Augustus, he committed his living body to the flames.'

Sarmarus should probably be *Sarmanus*, i. e. a Buddhist priest. He is the Zarmano-chegas of Strabo.

From Dion Cassius - Xiphil. ii. p. 329.

He (Hadrian) consecrated (in the Olympion at Athens) a serpent brought from India.

have never been tamed resort of themselves to India and there build their nests and form their lairs. Parrots are natives of the country, and keep hovering about the king and wheeling round him, and vast though their numbers be, no Indian ever eats a parrot. The reason of all this is that they are believed to be sacred and that the Brachmans honour them highly above all other birds. They assign a specious enough reason for their doing so — namely, that the parrot alone, from the admirable conformation of its vocal organs, can imitate human speech. Within the palace grounds there are also artificial ponds of great beauty in which they keep fish of enormous size but quite tame. No one has permission to fish for these except the king's sons while yet in their boyhood. These youngsters amuse themselves without the least risk of being drowned while fishing in the unruffled sheet of water and learning how to sail their boats.<sup>1</sup> (Aelian, Book XIII, c. xviii).

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1. The palace here described is no doubt that of Sandrokottos (Chandragupta) at Palibothra, now Patna. The account which is most probably copies from Megasthenes, may be compared with that which is given by Q. Curtius in his *History of Alexander the Great* (viii. 9).

## CHAPTER VI.

### TAPROBANE (CEYLON)

They say that Taprobane<sup>1</sup> is an island lying out in the sea, distant from the most southern parts of India

1. Taprobane is Ceylon. Our author in his Second Book (c. i. 14) writes of it thus: 'Taprobane is universally believed to be a large island situated in the high seas, and lying to the south opposite India. Its length in the direction of Ethiopia is, they say, more than 5000 stadia. From thence ivory, tortoise shells, and other articles are brought in large quantities to the Indian markets. Now if this island is broad in proportion to its length we cannot suppose that the whole distance, inclusive of the space with which separates it from India is less than 3000 stadia which represents the distance of the (southern) extremity of the habitable earth from Meroe, since the extremities of India are under the same parallel as Meroe'. Meroe, however, lies seventeen degrees to the north of the equator, while Cape Comorin the S. extremity of India only eight degrees. The ancient accounts are singularly erroneous with regard to the position, size, and shape of this island. Ptolemy, who has given a long and minute description of it, makes it to be about fourteen times its actual size, although he determined properly its general form and outline. The author again of the *Periplus of the Erythraean Sea* has made it extend so far westward as almost to adjoin the African continent. Its real length from north to south is  $271\frac{1}{2}$  miles, and its greatest width  $137\frac{1}{2}$  miles. Its area is one-sixth smaller than that of Ireland. Our author, however (ii. v. 32) makes it to be no less than Britain. Its name *Taprobane* is generally regarded as a transliteration of *Tāmraparnī* the name which Vijaya, who led the first Indian colony into the island, gave to the place where he first landed. The Pali form of this name, *Tambapanni*, is found in the inscription of Aśoka on the Girnar rock. Another name of Ceylon - one given to it by Brahmanical writers - is *Dwīpa Rāvana*, i. e. 'the island of Rāvana',

which are next to the country of the Kōniakoi, a seven days' voyage to southward, and extending about 8000 stadia in the direction of Ethiopia. It too produces elephants. Such are the accounts of Eratosthenes; and these, when supplemented by the accounts of other writers when they convey exact information, will determine the nature of our description of India. (Strabo, XV. i. 14).

Size:

Onesikritos, for example, says with regard to Taprobane that it has a magnitude of 5000 stadia, without distinction of length or breadth; that is distant from the mainland a voyage of twenty days, but that the vessels employed for the voyage sail badly owing to the wretched quality of their sails and to the peculiarity of their structure;<sup>1</sup> that other islands lie between it and India, but that Taprobane lies farthest to the south; that there are found around its shores cetaceous animals which are amphibious and in appearance like oxen, horses and other land animals.<sup>2</sup> (Strabo, XV. i. 15).

and this may be perhaps the origin of *Taprobane*'. The voyage from the Ganges to Ceylon, in the time of Eratosthenes, occupied seven days, whence he (Strabo) concluded that Ceylon was seven days sail from the continent.—Falconer's Strabo.

1. The text seems to be here corrupt. It is thus translated by Falconer: 'Vessels built with prows at each end, but without holds and keels.'
2. Aelian in his *History of Animals* (xvi. 18, 19) names and describes a number of very peculiar cetaceans found in the seas which surround Taprobane. 'The sea,' he says, 'is reported to breed an incredible number of fish, both of the smaller fry and of the monstrous sort, among the latter being some which have the heads of lions and panthers and of

### Situation :

This Taprobane is universally believed to be a large island situated in the high seas, and lying to the south, opposite to India. Its length in the direction of Ethiopia is above 5000 stadia,<sup>1</sup> as they say. (Strabo, Sec. II. i. 14).

### Description :

Taprobane,<sup>1</sup> under the name of the 'Land of the Antichthones', was long regarded as another world. The age and achievements of Alexander the Great made it clear that it is an island. Onesikritos, the commander of his fleet, had stated that its elephants are larger and more bellicose than those of India, and from Megasthenes we learn that it is divided by a river, and that its inhabitants are called Palaeogoni, and that it is more productive of gold and pearls of a great size than India itself. Eratosthenes has also given its dimensions as 7000

other wild beasts, and also of rams; and, what is still more wonderful, there are monsters which in shape closely resemble satyrs; others are in appearance like women, but instead of having locks of hair are furnished with prickles. It is affirmed, moreover, that this sea contains certain strangely formed creatures to represent which in a picture would baffle all the skill of the artists of the country, who for sensational effect are in the habit of painting monsters which consist of different parts of various animals pieced together. They say whales also frequent this sea, though it is not true that they approach the shore lying in wait for tunnies. The dolphins are reported to be of two sorts....There are also sea - hares which in all respects but the fur resemble land - hares.

1. Six hundred and twenty - five miles — a gross exaggeration.
1. With Pliny's description of Taprobane may be compared that that of Ptolemy the Geographer, who wrote about a century later. This description will be found translated in my work, *Ancient India as described by Ptolemy*, pp. 247-259. The account may also be compared with that given below by Kosmas Indikopleustes.

stadia in length and 5000 stadia in breadth,<sup>2</sup> while he states that it has no cities, but villages to the number of seven hundred.<sup>3</sup> It begins at the Eastern Sea, and lies extended over against India east and west. The island in former days, when the voyage to it was made with vessels constructed of papyrus and rigged after the manner of the vessels of the Nile, was thought to be twenty days' sail from the country of the Prasii, but the distance came afterwards to be reckoned at a seven days' sail according to the rate of speed of our ships.<sup>4</sup> The sea between the island and India is full of shallows not more than six paces in depth, but in some channels so deep that no anchorors can find the bottom. For this reason ships are built with prows at each end to obviate the necessity of their turning about in channels of extreme narrowness. The tonnage of these vessels is 3000 amphorae.<sup>5</sup> In making sea - voyages, the Taprobane mariners make no observations of the stars, and indeed the Greater Bear is not visible to them, but they take birds out to sea with them which they let loose from

2. The extreme length of the island from north to south is  $271\frac{1}{2}$  miles and its greatest width  $137\frac{1}{2}$  miles. Its size was always enormously exaggerated by the ancients — even by Ptolemy, whose description of it is otherwise wonderfully accurate.
3. Aelian makes the number of the villages to be 750.
4. Nine or ten leagues per day — Falconer.
5. The amount of cargo carried by ancient ships was generally computed by the talent or the amphora, each of which weighed about a fortieth of a ton. The largest ships carried 10,000 talents or 250 tons. The talent and the amphora each represented a cubic foot of water, and as a Greek or Roman foot measured about '97 of an English foot, the talent and the amphora each weighed very nearly 57 lbs. See Torr's *Ancient Ships*. p. 25.

time to time and follow the direction of their flight as they make for land. The season for navigation is limited to four months, and they particularly shun the sea during the hundred days which succeed the summer solstice, for it is then winter in those seas.<sup>6</sup>

### Contacts :

So much we have learned from the old writers. It has been our lot, however, to obtain a more accurate knowledge of the island, for in the reign of the Emperor Claudius<sup>7</sup> amassadors came to his court therefrom, and under the following circumstances. A freedman of Annius Plocamus, who had farmed from the treasury the Red Sea revenues, while sailing around Arabia was cartied away by gales of wind from the north beyond Carmania. In the course of fifteen days he had been wasted to Hippuri, a part of Taprobane,<sup>8</sup> where he was humanely received and hospitably entertained by the king; and having in six month's time learned the language, he was able to answer the questions he was asked. The king particularly admired the Romans and their emperor as men possessed of an unheard of love of justice, when he found that among the money taken from the captive the denarii were all of equal weight although the different images stamped on them showed that they had been coined in the reigns of several emperors.<sup>9</sup> This influenced

6. The S.-W. monsoon prevails from June to October.

7. Claudius reigned from 41 to 54 A. D.

8. Hippuri or Hippuros has been identified with a port called Kudremale, the name of which has the same meaning (horse-tails) in Sanskrit.

9. There is yet another symbol of the power which God has conferred upon the Romans. I allude to the circumstance that it is with their money all the nations carry on trade from one extremity of the earth to the other. This money

him most of all to seek an alliance with the Romans, and he accordingly despatched to Rome four ambassadors, of whom the chief was Rachia. (i. e. Rajah).

### Political Geography, and natural resources:

From these it was ascertained that in Taprobane there are 500 towns, and that there is a harbour facing the south, adjacent to the city of Palaesimundus, the most famous city in the island, the king's place of residence and inhabited by a population of 200,000. They stated also that in the interior there is a lake called Megisba 375 miles in circuit, and containing islands which are fertile, but only for pasturage.<sup>10</sup> From this lake, they said, there issued two rivers, one of which, called Palesimundus, flows into the harbour near the city of the same name by three channels, the narrowest of which is five stadia wide, the largest fifteen, while the third, called Cydara, has a direction northward towards India. They further said that the nearest point in India is a promontory called *Coliacum*<sup>11</sup> a four days' sail distant from the island, and that midway between them

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is regarded with admiration by all men to whatever kingdom they belong, since there is no other country in which the like of its exists.' Kosmas Indikopleustes, *Christian Topography*, See below.

10. There is in fact no such lake in Ceylon, nor anything even deserving the name of a lake, nor does any of the more considerable rivers of the island hold its course to the south. The statement probably referred to some artificial lake. See Bunbury's *Hist. Anc. Geog.* ii. 423.
11. Kolis is a name by which Pomponius Mela and Dionysios Periegetes designate Southern India. Pliny's promontory *Coliacum* is Cape Kory, the headland which bounded the Organic Gulf on the south. The two names are varian forms of the Indian word *Koti* (in Tamil, *Kodi*, which naturally becomes *Kori* or *Kory*), which means *end* or *tip*.

lies the island of the Sun; also that those seas are of a vivid green colour, and that a great number of trees grow at the bottom,<sup>12</sup> so that the rudders of ships frequently break their crests off. They saw with astonishment the constellations visible to us — the Greater Bear and the Pleiades<sup>13</sup> — as if they were set in a new heaven and they declared that in their country the moon can be seen above the horizon from her eighth to her sixteenth day,<sup>14</sup> while they added that Canopus, a large, bright star, illuminated their nights. But what most of all excited their wonder was that their shadows fell towards our part of the world and not to their own,<sup>15</sup> and that the sun rose on the left hand and set on the right, and not in the opposite direction.<sup>16</sup> They also informed us that the side of their island which lies opposite to India is 10,000 stadia in length, and runs south east — that beyond the Hemodi mountains they look towards the Seres, with whom they had become acquainted by commerce, also that the father of Rachia had often gone to their country, and that the Seres came to meet their visitors on their arrival. These people, they said, exceeded the ordinary stature of mankind and had yellow hair and blue eyes; the tones of their voice were harsh and uncouth, and they could not communicate their thoughts by language. In other particulars their accounts of them agreed with the reports

12. No doubt *coral reefs*, which abound in the Gulf of Manaar.

13. The Pleiades must at that time have been known to the people of Ceylon.

14. 'This', says Falconer, 'was a fable, or else originated in misapprehension of their language on the part of the Romans.'

15. For about seven months in the year the shadows there fall to the north, and to the south during the other five.

16. This is fabulous.

of our own merchants, who tell us that the wares which they deposit near those brought for sale by the Seres, on the further bank of a river *in their country*, are removed by them if they are satisfied with the exchange.<sup>17</sup> The detestation of luxury could not in any way be better justified than by our transporting our thoughts to these regions and reflecting what the things are that are sought for to gratify it, from what vast distances they are brought, and for what low ends.

But yet Taprobane even, though isolated by nature from the rest of the world, is not exempt from our vices. Even there gold and silver are held in esteem. They have a marble which resembles tortoiseshell, pearls also and precious stones, and these are all held in high honour. Their articles of luxury surpass our own, and they have them in great abundance. They asserted that their

17. 'Under any circumstances,' says Falconer, 'the Serae here spoken of must not be taken for the Seres or supposed Chinese. Gosselin remarks that under this name the people of a district called Sera are probably referred to, and that, in fact, such is the name of a city and a whole province at the present day, situate on the opposite coast, beyond the mountains which terminate the plains of the Carnatic. It is equally impossible that under the name of 'Emodi' Pliny can allude to the Himalaya chain, distant more than two thousand miles.' We think, notwithstanding, that it was with the Seres or Chinese that the trade here mentioned was carried on. Merchants from Taprobane may have attended the fair which as we learn from the *Periplus of the Erythraean Sea* (c. 65), was held annually on the confines of Thinai (China) and was conducted on the silent system without the use of interpreters. This silent mode of bartering commodities was practised also in Aethiopia, as we learn from the Second Book of the *Christian Topography* of Kosmas Indikopleustes, where a circumstantial account is given of it.

wealth is greater than ours, but acknowledged that we excelled them in the art of deriving enjoyment from opulence.

### Life in the Island :

There are no slaves in the island ; the inhabitants do not prolong their slumbers till daybreak, nor sleep during the day ; their buildings are only of a moderate height from the ground ; the price of corn is never enhanced ; they have no courts of law and no litigation. Hercules is the God they worship ; their king is chosen by the people and must be an old man, of a gentle disposition and childless, and if after his election he should beget children, he is required to abdicate, lest the throne should become hereditary ; thirty counsellors are provided for him by the people, and no one can be condemned to death except by the vote of the majority—the person so condemned has, however, the right of appeal to the people, in which case a jury of seventy persons is appointed ; if these should acquit the accused, the thirty counsellors lose all the respect they enjoyed, and are subjected to the uttermost disgrace. The king dresses like Father Bacchus ; the people like the Arabs. The king, if he offend in aught, is condemned to death, but no one slays him — all turn their backs upon him and will not communicate with him in any way, not even by speech. Their festive occasions are spent in hunting, their favourite game being the tiger and the elephant. The land is carefully tilled ; the vine is not cultivated, but other fruits are abundant. Great delight is taken in fishing, especially in catching turtles, beneath the shells of which whole families can be housed, of such vast size are they to be found.<sup>18</sup> These people

18. Compare Aelian, *Hist. Anim.* xvi. 18. 'In the sea which surrounds the island (Taprobane) tortoises have such enormous

look upon a hundred years as but a moderate span of life. Thus much we have learned regarding Taprobane. (Pliny, Sec. V, Book VI. c. 22 (24).

### Smaller Island:

This is a large oceanic island lying in the Indian Sea. Among the Indians it goes by the name of Sielediba, but the Pagans call it Taprobane,<sup>1</sup> wherein is found the stone, hyacinth.<sup>2</sup> It lies farther away than the pepper country. Around it there is a great number of small islands,<sup>3</sup> all of them having fresh water and coconut trees. They nearly all have deep water close up to them. The great island, as the natives allege, has a length of three hundred *gaudia*, and a breadth of as many — that is of nine hundred miles.<sup>4</sup> There are

shells that these are employed to make roofs for the houses; for a shell being fifteen cubits long can hold a good number of people under it, screening them from the scorching rays of the sun besides affording them a welcome shade.'

1. This island has been known by many names. See p. 183, From Ptolemy we learn that the ancient name was *Simundu*, but in his own time *Salike*, i. e. the country of the Salai. Here we have in a slightly altered form the Siele - diva of Kosmas, for *diva* is a form of *dwipa*, Sansk, for island. Both Salai and Siele have their source in Sihalam (pronounced as *Silam*), the Pali form of Sansk. *Sinhala*, a 'lion' or lion — like man — a hero. To this source may be traced its other names, such as Serendib, Zeilan, Sailan, and Ceylon.
2. Some think this is not our Jacinth, but rather the sapphire, while others take it to the amethyst.
3. The Laccadives. The name means *islands by the hundred thousand*.
4. The *gaudia* word in which Kosmas states the dimensions of the island represents the native word *gaou*, which is still in use and means *the distance which a man can walk in an*

two kings in the island who are at feud with each other. The one possesses the hyacinth,<sup>5</sup> and the other the rest of the island wherein are the port and the emporium of trade. The emporium is one much resorted to by the people in those parts.<sup>6</sup> The island has also a church of Persian Christians who have settled there, and a presbyter who is appointed from Persia, and a deacon and a complete ecclesiastical ritual.<sup>7</sup> The natives and their kings are, however, heathens in religion. In this island they have many temples, and in one situated on an eminence is a single hyacinth as big as a large pine—cone, the colour of fire, and flashing from a distance, especially when the sunbeams play around it—a matchless sight.<sup>8</sup>

*hour.* With regard to the dimensions of Ceylon and its distance from India, see *ibid.*

5. Tennent (*Ceylon*, vol. i. p. 543) rejects Thevenot's notion that by *hyacinth* Kosmas meant here 'the part of the island where jacinths are found', on the ground that the region which produces gems, namely the south part of the island, is that which has also the port and the emporium. The king who possessed the wonderful gem, called by Gibbon the *luminous carbuncle*, ruled the northern part of the island.
6. The emporium, according to Gibbon, was Trinquemale, but Tennent takes it to be Point de Galle.
7. This was a branch of the Nestorian Church.
8. The Chinese pilgrim, Hiouen Thsiang, who was a century later than Kosmas, relates that at Anarajapura, on a spire surmounting one of its temples, a ruby was elevated which, with its transcendent lustre illuminated the whole heaven. Marco Polo again relates that the King of Ceylon was reported to have the greatest ruby that ever was seen—one that was flawless and brilliant beyond description. Tennent thinks that this stone was not a ruby but an amethyst, a gem found in large crystals in Ceylon, which, according to mineralogists, is the *hyacinth* of the ancients.

### Ceylon a great trading centre:

As its position is central, the island is a great resort of ships from all parts of India, and from Persia and Ethiopia and in like manner it despatches many of its own to foreign ports. And from the inner countries,<sup>9</sup> I mean China and other marts in that direction, it receives silk,<sup>10</sup> aloes, clovewood, sandalwood,<sup>11</sup> and their other products, and these it again passes on to the outer ports, I mean to Male,<sup>12</sup> where pepper grows, and to Kalliana,<sup>13</sup> where copper is produced and sesame wood and materials for dress; for it is also a great mart of trade; and to Sindu<sup>14</sup> also, where musk or castor is got, as well as *Androstachus*,<sup>15</sup> and to Persia and the Homerite country, and to Adule.<sup>16</sup> Receiving in return the traffic of these marts, and transmitting it to the inner ports, the island exports to each of these at the same time her own products. Sindu is the frontier country of India, for the river Indus, that is, the Phison,

9. Gr. *ταντούρεαν* The countries inside of Cape Comorin that is, to the east of it.

10. Gr. *μέταξω* This word, which occurs in Latin as well as in Greek, but in the form *metaxa*, means properly 'yarn'. It was used, however, by the mediaeval Greeks to signify *silk* in general.

11. Gr. *τζανδαναν*.

12. The coast of Malabar.

13. Kalliana, now Kalyana, near Bombay, is named in the Kanheri Baudha cave inscription, and also in the *Periplus*, where it is stated that it was raised to the rank of a regular mart in the days of the elder Saragones.

14. Sindh, the lower valley of the Indus.

15. Gr. *ανδροσαγγην* This word does not occur elsewhere, and I, therefore, take it to be an error in transcription for *άρδου σαγχην* or *ναρδοσαγχην* = *spica nardi* i. e. spikenard.

16. Now Thulla or Zula on Annesley Bay.

which empties itself into the Persian Gulf, separates from India<sup>17</sup>.

### Famous Commercial mart in India :

The following are the most famous commercial marts in India :— Sindus, Orrhotha,<sup>18</sup> Kalliana, Sibor,<sup>19</sup> Male, which has five marts that export pepper, Parti, Mangarouth,<sup>20</sup> Salopatana, Nalopatana, Poudopatana.<sup>21</sup> Then out in the ocean at the distance of five days and nights from the mainland lies Selediba, that is, Taprobane. Then, again, farther away and on the mainland is the mart Marallo, which exports chank-shells, then comes Kaber,<sup>22</sup> which exports alabandenum, then next is the clove country, then China,<sup>23</sup> which produces silk,

17. The Persian empire when overthrown by Alexander the Great extended to the Indus, and even embraced territories lying eastward from that river.
18. Pliny mentions an Indian race called the Horatae, who adjoined the Gulf of Cambay. The name is an incorrect transcription of *Sorath*, a form of *Saurāshtra*, the Surastrene of the *Periplus* and of Ptolemy. It is now Gujarat. It cannot be Surat, since this was not a place of any importance till Portuguese times. Orrhotha seems to have been a port on the western coast of the Gujarat peninsula.
19. Probably Chaul, a seaport lying about twenty three miles to the south of Bombay. This port is the *Simylla* of Ptolemy, and the *Saimur* of Jaimur of the Arabian geographers.
20. Mangalor.
21. The termination *patana* in these names means *town*. Poudopatana (*new town*) in the *Podoperoura* of Ptolemy. These three places were situated on the coast of *Kottonarikē*— the pepper country.
22. The emporium called by Ptolemy Chaveris, the modern Kaveripattam, which lies north of Tranquebar at the Pudu Kāverī (New Kāverī). The Sanskrit word *Kāverī* means 'Saffron.'
23. Gr. οἰνούρα The name of that part of China which was reached by sea, *Serica* designating the part reached by land.

beyond which there is no other land, for the ocean encircles it on the east.

**Ceylon's contact with India and the Roman world :**

Sielediba being thus in a central position with reference to the Indies, and possessing the hyacinth, receives wares from all trading marts, and again distributes them over the world, and thus becomes a great emporium.<sup>24</sup> Now once upon a time one of our countrymen engaged in commerce and called Sopater, who to our knowledge died five-and-thirty years ago, came on business to the island of Taprobane, where also, it so happened, a ship from Persia came to moorings. So the men from Adule, among whom was Sopater, disembarked, as did likewise the men from Persia, among whom there was one of advanced age. Then in accordance with the custom of the place, the magistrates and the custom house officials received them and brought them to the king.<sup>25</sup> The king, having admitted them to his presence and received their obeisances, requested them to be seated. Then he asked them: How fares it with the countries you come from, and how are things moving there? To this they replied: Things are going on all very well. Afterwards, when in the course of conversation the king inquired: Which of your respective kings is the greater and the more powerful? The Persian, who was in haste to speak first, replied: Our king is

Kosmas was the first who laid down the ocean as the correct boundry of China on the east.

24. In the days of Kosmas the name of India was extended to Ethiopia on the west, and to countries beyond the Ganges on the east.
25. This king was probably Kumaara Daas, who reigned from 515 to 524 A. D. Tennent in relating this incident has been misled by Thevenot's version into stating that the aged Persian came with Sopater from Adule instead of from Persia.

both more powerful, and is greater and richer and is king of kings, and he can do whatever he pleases. Sopater, on the other hand, remained silent. So the king asked: Have you, Roman,<sup>26</sup> nothing to say? What have I to say, he rejoined, when he there has said these things? If you wish to ascertain the truth, you have both the kings here. Examine each and you will see which of them is the more illustrious and the more powerful. On hearing this the king was surprised at what he said, and asked: How, have I both the kings here? The other then replied: You have the money<sup>27</sup> of both — the current coin<sup>28</sup> of the one and the drachma of the other, that is, the miliarision.<sup>29</sup> Examine the image of each, and you will see the truth. The king thanked the man, and, assenting to his proposal, ordered both coins to be produced. Then the Roman coin had a good ring, and was bright and finely shaped, for choice pieces of this nature are exported thither.

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26. Gr. *αὐτῷ Ρωμαῖον* *Roomi* is the term applied in India to all the powers who have been successively in possession of Constantinople, whether Roman, Christian, or Mahomedan. — So Vincent.
27. Gr. *μανούεις* This is the Latin word *monetas* not quite correctly transliterated. *Moneta* was a name of Juno, in whose temple money was coined. *Moneta* is properly the figure of the goddess stamped on the coin. It is uncertain why Juno came to be called *Moneta*. See the question discussed s. v. in Smith's Classical Dictionary.
28. Gr. *αυριον* The *aureus*, first coined by Constantine the Great, contained  $1/12$  part of a pound of gold — a standard maintained to the end of the empire.
29. This word is generally written *μιλιαρησιον*. It was a silver drachma, twenty of which made a Daric. Gold and silver denarii, as we learn from the *Periplus*, were among the imports of Barygaza (Bharoch). The silver denarius was nearly equal in value to the drachma.

But the miliarision was silver, and, to say in a word all that need to be said, was not to be compared with the gold piece. The king having closely examined each of the coins both on the obverse and the reverse side, bestowed all manner of praise on the Roman coin, and said: Truly the Romans are splendid men and powerful and possessed of great good sense. He therefore commanded Sopater to be greatly honoured, and having mounted him on his elephant, he conducted him round the whole city with drums beating and many marks of honour. All this was told us by Sopater himself as well as by his companions who had gone with him to that island from Adule.<sup>30</sup> This occurrence, they assured me, overwhelmed the Persian with shame. ( Kosmas Indikopleustes, Sec. VIII, Book XI ).

#### The Makrobioi in Ceylon :

Now, for what I have been able to learn about the Brachmans I am indebted to a certain Theban scholar, who willingly left his home to travel abroad, but had unwillingly to endure captivity. This person, so he told me, was unfitted by nature to succeed in the legal profession and, regarding it with indifference, resolved to explore the land of the Indians. So he set sail with an elderly man and came first to Adoulis ( Adule ), and next to Auxoume.....in which a petty Indian King resided. After spending some time there and making many acquaintance, he formed a wish to visit the island of Taprobane, inhabited by the people called Makrobioi ( that is, the long lived ). For in that island the old live to 150 years by reason of the extreme goodness of

30. This seems to be a traditional story, for we learn from Pliny that Ambassadors who had been sent from Ceylon to the Emperor Claudius regarded with profound respect the Roman denarii.

the climate and through the unsearchable will of Heaven. In this island, too, resides the Great King of the Indians, unto whom all the petty kings of that country are subject as satraps, as the scholar himself explained to me, who had himself learned the fact from some one else, for he had not been able to enter the island. In the neighbourhood of this island, if I have not been falsely informed are a thousand other islands in the Erythraean Sea lying close to each other. Since, then the magnet stone which attracts iron exists in these islands, which are called the Maniolai, if any vessel that has iron nails approaches them, it is held back by the property inherent in the magnet so that it cannot reach the shore. But there are boats specially adapted for crossing over into the great island, being fastened with wooden pegs.

#### Ceylonese rivers and natural resources :

'This island', the traveller says, 'has five very large rivers, which are navigable. As the islanders informed him, the trees in these parts were never without fruit — for, as he states, while on the same tree one spray is budding, another has unripe fruit, and a third fruit that is quite ripe. The island has also palm trees and nuts of the largest size produced in India, as well as the small odoriferous nut. The inhabitants of that country live on milk, rice, and fruit. As neither cotton nor flax is a product of their soil, they wear round their loins the fleeces of sheep beautifully worked, but leave the rest of the body bare. The sheep have hair instead of wool, give great quantities of milk and have broad tails. They use as food mutton and goat flesh, but no pork — for from the Thebaid to the farthest confines of India and Ethiopia the swine is not to be found on account of the excessive heat. The scholar therefore

relates that "when I found certain Indians engaged in commerce, embarking on a voyage across from Auxoume, I was tempted to go farther a field, and reached the people called the Bisadae, who gather the pepper. They are a feeble folk, of very diminutive stature, and live in caves among the rocks. They understand how to climb precipices through their intimate knowledge of the localities, and are thus able to gather the pepper from the bushes. For, as my informant, the scholar, told me, pepper grows on a low dwarf tree, while the Bisadae are small men of stunted growth, but with big heads, the hair of which is straight and is not cut. The Ethiopians and Indians elsewhere are black and of a youthful appearance and have bristly hair. When I plucked up courage and endeavoured to enter that country, I was prevented by the sovereign, and neither did they understand what I said in my own behalf, as they knew not the language of my country, nor did I again know what inquiries they were addressing to me for I new not their language. All we could do was to keep in line with each other by employing distortions of the eyes as intelligible signs. For my part, I conjectured the import of what was charged against me from the bloodshot colour of their eyes and from the fierce grinding of their teeth. They, on the other hand, were quick to perceive, from the trembling of my limbs, the paleness of my face, from my terror and anguish, the pitiable state of my mind and the coward fears that shook my frame. I was accordingly detained among them for six years, during which I had to work in the service of a banker to whom I was handed over. The expenditure of their king, he says, was a peck ( $\muοδιος$  Latin *Modus*) of flour for the whole place. Where this king came from I know not. As I was in captivity for

six years, I thus by degrees learned a good deal of their language and acquired also some knowledge of the adjacent tribes, I got away, he proceeds, from that place in the manner following. Another king, who made war upon the one who detained me, accused him to the Great King, who resides in Taprobane, of having made a Roman citizen of importance prisoner, and of subjecting him to the meanest of employments. Then the Great King sent one of his officers to investigate the case, and he, on learning the truth, ordered the offender to be flayed and his skin to be made into a bag, for his insolent treatment of a Roman. For the people there are said to have a profound respect for the Roman empire, yea, even to entertain a dread of the Romans, who could invade their country, owing to their matchless courage and their prowess in war.

(Pseudo Kallisthenes, Book III. vii.).

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## CHAPTER VII

### The Indian Fauna ; animals

#### Elephants: the manner of hunting :

The manner of hunting the elephant is as follows.<sup>1</sup> Round a bare piece of ground is dug a deep ditch about five or six stadia in extent, and over this a very narrow bridge is thrown at the place of entrance. Into the enclosure three or four of the tamest female elephants are then driven. The men themselves lie in wait in concealed huts. The wild elephants do not approach this trap by day, but they enter it by night in single file. When all have passed the entrance, the men secretly close it. They then introduce the strongest of the tame combatants, the drivers of which fight with the wild animals, and also subdue them by hunger. When the latter are at length overcome with fatigue, the boldest of the drivers dismount unobserved and each of them creeps under his own elephants, and from this position creeps under the belly of the wild elephants and ties his legs together. When this has been done they incite the tame elephants to beat those which are tied by the legs till they fall to the ground. Thereupon they bind the wild and tame elephants together by the neck with thongs of raw ox-hide, and to prevent them shaking themselves in order to shake off those, who attempt to mount them, they make cuts round their neck, and then put thongs of leather into the incisions, so that the animals are forced by pain to submit to their bonds and

1. Arrian has also extracted from Megisthenes the same passage about elephant hunting, but somewhat more fully, in the thirteenth and fourteenth chapters of his *Indika*

remain quiet.<sup>2</sup> From the number taken, such as are too old or too young to be serviceable are rejected and the rest are led away to the stables. Here they tie their feet one to another, and their necks to a pillar firmly fixed in the ground, and tame them by hunger.

#### Taming of elephants :

Their strength they restore afterwards with green reeds and grass. In the next place they teach them to obey, effecting this by soothing them, some by words, and others by song and the music of the drum. Few of them are difficult to be tamed, for they are naturally of a mild and gentle disposition, so as to approximate to rational beings. Some of them have taken up their drivers who have fallen in battle and carried them off in safety from the field. Others have fought in defence of their masters who had sought refuge by creeping between their forelegs, and have thus saved their lives. If in a fit of anger they kill either the man who feeds them or the man who trains them, they are so overpowered with regret that they refuse food, and sometimes die of hunger. (Strabo, XV. i. 42).

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#### Copulation : and longevity :

They copulate like horses, and produce young chiefly in the spring. It is the season for the male, when he is in heat, and becomes ferocious. At this time he discharges

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2. Aelian in his *History of Animals* (xiii. 44) says : The Indians on finding the elephant still refractory after its capture, charm its ears with their native melodies, and soothe it with the music of an instrument in common use which has four strings and is called a *skindapsos*. The same author (xiii. 7) writes more diffusely than Strabo about the means employed for curing the diseases of elephants. The mode of capturing elephants described in the text is still employed, and without much variation.

some fatty matter through an orifice in the temples. It is also the season for the females, when the corresponding passage is open. They go with young for a period never less than sixteen months and never more than eighteen. The dame suckles her young for six years. Most of them live as long as men who attain the utmost longevity some even to the protracted age of two hundred years. They are subject to many diseases which are difficult to be cured. A remedy for diseases of the eye is to bathe it with cow's milk. For most of their complaints they are closed with dark wine, and for wounds they drink butter, for it draws out iron instruments. Their sores are formented with swine's flesh. Onesikritos says that they live three hundred years, and seldom five hundred, and that they are very vigorous when about two hundred, and that they go with young ten years. He and other writers say that they are larger and stronger than the African elephants. They can thus pull down battlements with their trunks, and tear up trees by the roots, standing erect on their hind legs. We learn from Nearchos that in the hunting grounds traps are laid at certain places where roads meet, and that the wild elephants are forced into these traps by the tame ones, which are stronger and directed by a driver. They become so tame and docile that they even learn to throw a stone at a mark, to use weapons of war, and to swim most admirably. A chariot drawn by elephants is regarded as a very important possession, and they are driven without bridles. A woman is signally honoured who receives from her lover the present of an elephant,<sup>1</sup> but this statement

1. On this point Arrians says (*Ind. c. 17*), 'Indian women if very prudent would not sacrifice their virtue for any reward short of an elephant, but on receipt of one their scruples vanish. Nor do the Indians consider it any disgrace to a woman

does not agree with what has been said (by another writer) that a horse and an elephant are the property of kings only. (Strabo, XV. i. 43)

### Reptiles :

As we have mentioned what Megasthenes and other writers have told us about the hunters and about the wild beasts, we must add some more particulars. Nearchos expresses his surprise at the multitude and malignancy of the tribe of reptiles. They retreat from the plains to the villages which do not disappear under water at the time of the inundations, and fill the houses. On this account the people raise their beds to a great height from the ground, and are sometimes compelled to abandon their homes through the presence of these pests in overwhelming numbers.<sup>1</sup> In fact, were it not that a great proportion of the tribe suffered destruction by the waters the country would be reduced to a desert. The minute size of some and the immense size of others are sources of danger; the former, because it is difficult to guard against their attacks, the latter by reason of their strength, for snakes are to be seen of sixteen cubits in length.

### Snakes : smaller ones very dangerous :

Charmers go about the country who are supposed to be able to cure snake bites, and their art of medicine is all but entirely restricted to this, for they are seldom

to grant her favours for an elephant. On the contrary, it is taken as a high honour to the sex that their charms should seem to be worth an elephant.'

I. Marco Polo states (iii. 17) that the people of Malabar have their beds made of very light cane work, so arranged that, when they have got in and are going to sleep, they are drawn up by cords nearly to the ceiling and fixed there for the night. This is done to get out of the way of tarantulas as well as of fleas and such vermin.

attacked by disease, as they live frugally and abstain from wine.<sup>2</sup> When diseases do attack them their wise men treat them for recovery. Aristoboulos says that he did not see a single example of the magnitudes so much talked of— except a snake which was nine cubits and a span in length—I myself saw one in Egypt much about that size which had been brought from India.<sup>3</sup> He says also that he saw many serpents of a such smaller size, and asps and large scorpions.<sup>4</sup> None of these however are so dangerous as the slender small snakes, not more than a span long, which are found concealed in tents, in house utensils, and in walls and hedges. Persons wounded by them bleed at every pore, and suffer great pain, and die if assistance is not immediately rendered; but assistance is at command on account of the efficiency of Indian roots and drugs.

### Crocodiles :

Not many crocodiles, he says, are to be found in the Indus, and these are harmless to mankind, but most

2. Ktesias, as quoted by Photios, writes to the same effect. The Indians are not afflicted with headache or toothache or ophthalmia, nor have they mouth sores or ulcers in any part of their body.
3. Strabo was in Egypt with his friend Aelius Gallus in the year 24 B. C., some six years after the death of Cleopatra.
4. By *asps* are probably meant cobras, the bite of which is so deadly. Houses in India are not unfrequently infested both by cobras and scorpions. The sting of the latte is seldom fatal but is very painful. The cobra is from three to four feet in length. Aelian in his *Nat. Anim.* (iv. 36) describes, on the authority of Ktesias, an Indian serpent of a span long from which a most virulent poison was obtained. The description is found also in Photios's *Extracts* from Ktesias. Dr. Ball, Director of the Dublin Museum, thinks it may perhaps be identified with the Biscopra of the natives.

of the other animals of that river are the same as those bred in the Nile, except the hippopotamus. Onesikritos however says that this animal also is found there.<sup>5</sup> According to Aristoboulos, none of the sea-fish ascend the Nile, except the thrissa, the mullet, and the dolphin, on account of the crocodiles, but great numbers ascend the Indus. Small prawns (*καρπίδες*) find their way up as far as the mountains, and the larger sort as far as the junction of the Indus and Akesines. So much then on the subject of wild animals. (Strabo, XV. i. 45)

### Elephants and Dragons:

In India elephants are caught by the driver of a tame one guiding it towards a wild one which he has found alone or has separated from the herd. He then beats it, and when it is fatigued transfers himself to its back and manages it as he does, the other e. g. elephants when mad with rage are tamed by hunger and blows, other elephants being brought near them to restrain their fury by means of chains. Besides this, they are in the worst of temper when in heat, and at such times they demolish the huts of the Indians with their tusks. C. 11. It is India that produces the largest elephants as well as dragons, which are at perpetual war with them, and are of so enormous a size that they can easily twine themselves round their bodies and compress them in their coils. The fight ends in the death of both the combatants, for the elephant when vanquished, in falling to the earth, crushes with his weight the dragon which is twined round him.<sup>1</sup> C. 13. Ethiopia produces dragons, not so large as those of India, but still twenty cubits long.

5. Onesikritos must here be in error, as the hippopotamus belongs exclusively to Africa.

1. This dragon may perhaps be the python, which in the Sunder-bans at the mouths of the Ganges is of enormous size.

**Tiger :**

C. 25. Hyrcania and India produce the tiger, an animal of tremendous swiftness—a quality which is especially tested when we deprive the female of all her whelps, which are always very numerous.<sup>2</sup>

**Oxen :**

C. 30. In Ethiopia there are oxen like those of India, some with one horn and others with three. C. 31. In India there are oxen with solid hoofs and a single horn.<sup>3</sup>

**Asis :**

There is besides a wild beast called the Asis, with a skin like a fawn's, except that the spots are more numerous and whiter.<sup>4</sup> It is one of the animals sacred to father Bacchus.

**Apes :**

The Orsaean Indians hunt apes, the bodies of which are all over white, as well a very fierce animal.

**Unicorn :**

The monoceros (unicorn), which has the head of a stag, the feet of an elephant, and the tail of a boar, while the rest of its body is like that of the horse; it makes a deep sound in lowing, and has a single black horn which projects from the middle of its forehead, and is two cubits long. This animal, it is said, cannot be taken alive.<sup>5</sup>

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2. Three, four, or five at a time.
3. 'Cuvier conjectures that this is from Ktesias, and says that a similar animal is to be seen on one of the sculptures of Persepolis.' Bohn's *Trans.* ii. 280.
4. It has been supposed that this is the stag of the Ganges the *cervus axis* of Linnaeus.
5. The unicorn is probably the rhinoceros. There are five four-footed animals which, according to the ancients, had a single horn: the one-horned horse, the one-horned ox, the India ass, the oryx, and the monoceros of the text.

### Lycaon :

C. 52. The *tarandrus* of the Scythians changes its colour, but this is not the case with any of the animals which are covered with hair except the *lycaon* of India, which is reported to have a mane on its neck.<sup>6</sup>

### Porcupine :

C. 53. India and Africa produce the porcupine covered, like the hedgehog, with bristles. The quills, however, of the porcupine are longer, and when it distends its skin it discharges them like missiles. It conceals itself in the winter months.

### Lizards :

C. 60. The lizards of Arabia are a cubit in length, but those on Nysa, a mountain of India, are 24 feet long, and in colour either yellow, purple, or azure blue. C. 70. It is stated that the oxen of India are the height of camels, and that their horns are 4 feet from each other (at the tips).

### Wild boar :

C. 78. The wild boar of India has two curved teeth a cubit long, which project from below the snout. As many project from the forehead like the horns of a bull-calf. The hair of these animals in a wild state is of a copper colour, while the others are black. (Pliny, Book VIII. c. 8ff)

### Aquatic animals :

The most numerous and the largest of these (aquatic) animals are to be found in the Indian Sea. Among them are *baloenge* of 4 *jugera*, and the *pristis*, 200 cubits in length.<sup>1</sup> Here, too, are lobsters of 4 cubits and in the

6. Some take the *tarandrus* to be the *reindeer*, others the elk.

The *lycaon* is supposed by Cuvier to be the *Indian tiger*.

1. A *jugerum* is 240 feet long by 120 broad. Some take the *pristis* to be the saw fish.

river Ganges eels 306 feet long.<sup>2</sup> But at sea it is about the time of the solstices when these monsters are most to be seen. For it is then that in these regions the whirlwinds sweep on a main the rains descend, the hurricanes rush onward, hurled down from the mountain tops, while the sea upheaved from the very bottom rolls upon its surges the monsters that have been driven from their retreats in the depths below.

#### Lobsters and shoals:

At other times such vast shoals of tunnies are encountered that the fleet of Alexander the Great formed itself into line of battle to confront them, as it would have done when opposed to a hostile fleet, for, except by charging them with long pikes, the danger could not otherwise be evaded. No shouts, no noises, no crashing blows availed to frighten them. Nothing but their utter discomfiture dismayed and confounded them.<sup>3</sup> The captains of the fleet of Alexander the Great inform us that the Gedrosians who dwell near the river Arabis make the doors of their houses with the jaw-bones of fishes and rafter the roofs with their bones, many of which were found to be each no less than 40 cubits in length.

#### Sea monsters:

In the same country, too, the sea monsters go out into the fields on shore just like cattle, and after feeding on the roots of shrubs return home. Some of the them

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2. These eels are probably water snakes, of which the length has been enormously exaggerated.
3. This incident is related by Arrian in his *Indica* (c. 30). From the account there given, it was a school of whales not of tunnies, which alarmed the fleet under Nearchos. The incident is also related by Strabo (xv. ii. 12, 13).

which had the heads of horses, asses, and bulls pastured on the crops of grain.<sup>4</sup>

### Pristis and the balaena :

C. 3. The largest animals found in the Indian Sea are the pristis and the balaena. C. 12. The Indian Sea produces turtles of such vast size that the shell of a single animal suffices to roof over a habitable cottage.

### Platanista fish :

C. 17. In the Ganges, a river of India, is found a fish called the *platanista*; it has the muzzle and the tail of the dolphin, and is of the length of 16 cubits.<sup>5</sup>

### Huge worm :

Statius Sebosus<sup>6</sup> brings to notice, what is in no ordinary degree marvellous, that in the same river there is a worm which has two gills and is 60 cubits long. It is of an azure colour, and owes its name to the appearance it presents. These creatures, he says, are so strong that with their fangs they seize hold of the trunks of elephants that come to drink, and drag them into the river.<sup>7</sup>

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4. Aelian in his *History of Animals* writes to the same effect regarding certain amphibious animals found in the seas around Taprobane (Ceylon).
5. Probably, according to Cuvier, the dolphin of the Ganges, which has the muzzle and the tail of the common dolphin. Its length, as given, is exaggerated. The jaws are provided with numerous conical recurved teeth and are very destructive to fish. They are described by Aelian (H. A. xvi. 18).
6. A person of this name is mentioned by Cicero, in one of his epistles to Atticus, as being a friend of Catulus. He is elsewhere cited by Pliny.
7. Aelian (*Nat. An.* v. 3) describes a worm (*skolex*) very similar, but which has two *teeth*, not *gills*, and which seizes oxen and camels but not elephants. Cuvier has suggested that some large conger or muraena may have given rise to the

**Sea-mice :**

C. 35. Those fish called sea-mice, as well as the polypi and the muraenae, are in the habit of coming ashore. In the Indian rivers there is besides a certain kind of fish which does this and then leaps back, for they pass over into standing waters and streams.

**Sea fishes :**

Most fishes are evidently led by instinct to do this that they may spawn in safety, since in such waters there are no animals to devour their young, and the waves are less violent.

**Time of catching fish :**

It is still more a wonder to find that they have a comprehension of causation and observe the recurrence of periods when we reflect that the best time for catching fish is while the sun is passing through the sign of *pisces*.<sup>8</sup> (Pliny, Book IX, c. 2).

**Birds of diversified plumage :**

Ethiopia and India, more especially, produce birds of diversified plumage, and such as quite surpass all description. (Pliny, Book X, 2 (2)).

**Parrots :**

By the departure of the cranes which were in the habit of waging war with the pygmies, that race now

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story. Dr. V. Ball has identified the *skolex* of Aelian (who has described it from Ktesias) with the crocodile of the Indus – the garial.

8. This is also stated by the author of the treatise, *De Mirab. Auscult*, c. 72; and Theophrastus, in his work on the *Fishes that can live on land*, says that these Indian fishes resemble the mullet...Mr. Hamilton Buchanan, in his *History of the Fishes of Bengal*, says that these fish crawl on grass to so great a distance from their rivers, that the people absolutely believe that they must have fallen from heaven.' Bohn's *Pliny*, ii. p. 407.

enjoys a respite from their hostilities. The tracts over which they travel must be immense, when we consider that they come from such a distance as the Eastern Sea. C. 41 (58). Above all, there are birds that imitate the human voice - parrots, for instance, which are even able to converse. This bird is sent us from India, where it is called the *septagen*.<sup>9</sup> The body is all over green except that around its neck it is marked with a ring of red. It salutes its masters,<sup>10</sup> and pronounces such words as it hears spoken. It becomes very frolicsome under the effects of wine. Its head is as hard as its beak, and this is beaten with an iron rod if it does not learn to speak what it is being taught, for it feels no pain if struck elsewhere than on the head. When it alights it falls on its beak, and by supporting itself by this means it makes itself so much the lighter for its feet, which are naturally weak. (Pliny Book, X c. 30 (23)).

#### Horned animals :

Horned animals are in general cloven-footed, but no animal has at once a solid hoof and a pair of horns. The Indian ass alone is armed with a single horn, and is the only instance of a solid-hoofed animal that is provided with a pastern-bone.<sup>11</sup> (Pliny, Book XV, c. 46 (106)).

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9. In Bohn's translation *septagen* appears as sittaces, and in a footnote we read : 'Hence the Latin name *psittacus*. From this Cuvier thinks that the first known among these birds to the Greeks and Romans was the green parroquet with a ringed neck, the *Psittacus Alexandri* of Linnaeus.'
10. The original 'imperatores salutat' is translated in Bohn. It salutes an emperor.
11. The following passage occurs in the description of the Indian wild ass given by Aelian (*Hist. An.* iv. 52) : 'While all other asses wherever found, and whether wild or tame and even all solid-hoofed animals have neither a huckle-bone (*astragalus*)

The horns of the Indian ant were miraculously fixed up in the temple of Hercules at Erythrae. These ants dig gold from holes underground in the country of the Northern Indians who are called Dardae. They are of the colour of cats and of the size of Egyptian wolves. The gold which they dig up in winter the Indians steal in summer when the violence of the heat has compelled the ants to bury themselves in the ground. But the ants, being roused by the smell of the robbers, rush out of their holes, and overtaking the fugitives, as they frequently do, though these are mounted on the swiftest of camels, they tear them to pieces, so great is the speed and the ferocity of these animals, and withal their love of gold.<sup>12</sup> (Pliny, Book XI, c. 31).

#### Scincus :

The scincus has been called by some writers the land crocodile; but it is whiter in appearance and the skin is not so thick. The main difference, however, between it and the crocodile is in the arrangement of the scales, which run from the tail to the head. The Indian kind is the largest, the Arabian coming next. They are brought to us salted. C. 10 (45). The Greeks had no knowledge from experience of the urus and bison, although the forests of India are filled with herds of wild oxen. (Pliny, Book XXVIII c. 3 (30)).

#### Huge Size :

Those who now sail to India speak of the size of these animals and of their appearances, but say they do not come either in shoals or frequently, but are scared away by shouts and the sound of the trumpet. They

nor a gall in the liver, the Indian - horned asses, according to Ktesias, have both a huncle-bone and a gall in the liver.' This unicorn ass is the rhinoceros.

12. See note on Strabo, p. 44, n. 2.

state also that they do not come near the shore, but that the bones of those which die, bared of flesh, are readily cast ashore by the waves and furnish the Ichthyophagoi with the material already spoken of for the construction of their huts. The length of these whales, according to Nearchos, is twenty three *orgyiai*.<sup>1</sup> Nearchos says that he proved the falsehood of a story which was firmly believed in by the sailors in his fleet — that there was an island situated in the passage which proved fatal to those who anchored on its shores, since a bark disappeared when it came to this island and was never seen again, and some men, who were sent in search did not dare to land upon the island, but before sailing away from it shouted and called to the crew, when, as no one returned an answer, they took their departure. But as all blamed the island for the loss of the men, Nearchos tells us that he himself sailed to it, and having anchored, disembarked with a part of his crew and made a circuit of the island. But as he could find no trace of the men of whom he was in search, he gave the task and returned. He informed his men that the island was not to blame for the misfortune (for were it so, the same destruction would have overtaken himself and those who disembarked with him), but that some other cause, and countless others were possible, might have caused the disappearance of the vessel.<sup>2</sup> (Strabo, XV. ii. 13).

1. Arrian gives their length at 25 *orgyiai*, or about 150 feet. Compare with this passage regarding the whales Onesikritos (*frag. 30*), and Orthagoras in Aelian (*Hist. Anim. xvii. 6*); Diodor. (xvii. 106); Q. Curtius (x. i. ii.).
2. The details of this incident are given at greater length in Arrian's *Indika* c. 31. The name of the enchanted island which lay near the Makran coast to eastward of Cape Passence is there given as Nosala. It is now called Ashtola or

**Ants :**

The Indian ants which guard the gold never cross the river. The Issedones, who inhabit the same country with the ants, are called ants and are so.<sup>1</sup> (Aelian Book III, c. iv.)

A horn, it is said, was brought to Ptolemy the Second from India, which held three amphorae (about twenty-six gallons). It must have been an ox which grew a horn so prodigious.<sup>2</sup> (Book III, c. xxxiv.)

**One-horned horses and asses :**

India, according to report, breeds one-horned horses and also one-horned asses. From these horns drinking cups were made; and if into these one threw a deadly poison, the drinker would come by no harm from such a plot against his life, for the horn both of the horse and of the ass is an antidote against poison. (Aelian, Book III, c. xli.)

**Elephant's affection for his master :**

Contains a story (borrowed from the *Indika* of Ktesias) of the affection of an elephant for its master, and of the manner in which it fought for him when assailed by his enemies. For translation see *Indica of Megasthenes* pp. 118-19. (c. xlvi.)

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Sangadwip, a small desolate island about four or five miles in circumference, with cliffs that rise abruptly from the sea to the height of 300 feet. It is still regarded with superstitious fear by the natives of the neighbouring coast.

1. For an explanation of the myth of the gold digging ants see n. 31 pp. 44-45, and for a list of the authors who mention them see. p. 51 of McCrindle's *Ancient India*.
2. Ptolemy Philadelphos, says Strabo (xvii. i. 5) was a lover of science, and on account of bodily infirmities, was always in search of some new diversion and amusement. He was the first of the Lagids who instituted elephant-hunting in the Nubian forests.

### Indian dogs :

Indian dogs must also be reckoned as wild beasts, being unmatched for prowess and courage, and being of the largest size to be anywhere found. They regard with contempt all other animals. But with the lion the Indian dog sets himself to fight; he sustains his onset, barks back when he roars, and bites him when he bites. The dog is in the end beaten, but not till he has sorely harassed his antagonist and mangled him. And yet it sometimes happens that the lion is vanquished by the Indian dog and killed in the chase. In point of fact, if the dog once clutches him he holds on like grim death. Even if one should approach and with a knife cut off the leg of the dog, the pain will not induce him to let go his grip. Rather than let go he suffers the limb to be severed and his jaws relax not till life is extinct. He then lies prostrate, forced only by death to abandon the fray.<sup>3</sup> ( Book IV, c. xix ).

### Martikhora or Indian tiger :

This chapter describes the Martikhoras, an animal identified with the Indian tiger. Its name is a Persian word meaning *man-eater*. A translation of this chapter will be found in my *Indika of Ktesias*, pp. 40-42. Aelian has taken his description of the animal from Ktesias, as have also Aristotle (*Hist. Anim.* ii. 1) Pausanias (*Boiot.* ix. xxi. 4) Pliny (*H. N.* viii. 21 (al. 30), Philostratus (*v. A.* iii. 45) and Photios (p. 145). ( c. xxi ).

### Capturing an elephant :

The Indians cannot easily capture a full grown elephant, for they will neither attempt this, nor are elephants of such an age permitted to be caught. But the hunters repair to the swamps adjoining a river, and

3. Another account of the prowess of Indian dogs is given by this author in chapter i. of the Eighth Book.

there they catch the young ones. For the elephant loves grounds that are moist and soft, and enjoys being in the water, and prefers to spend his time in haunts of this nature, so that one may say he is a creature of the marsh. Now, as they caught, when of tender age and docile, the Indians bring them up delicately, supplying them with the food they relish most, grooming them carefully and talking to them in soothing accents, for the elephants understand the native tongue. They rear them, in short, like children, bestowing on them great care and attention, and subjecting them to a long course of training. (c. xxiv.)

### Griffin :

C. xxvii. Contains a description of the Griffin which will be found translated in the *Indika* of Ktesias (pp. 44-46), the author from whom Aelian borrowed the account, to which he added particulars from other sources. The griffin is first mentioned by Aristeas, who probably flourished about the time of Croesus, and is afterwards mentioned by Herodotus, Aeschylus, and other writers. The account of it as given by Ktesias has been preserved in the *Bibliotheca* of Photios. The following extract from a paper by the late Dr. V. Ball will show how the griffin (*Γρύψ*) has been identified:—‘Taking Photios’s account alone, and excluding from it the word birds, and for feathers reading hair, we have a tolerably accurate description of the hairy black and tan-coloured Thibetan mastiffs, which are now, as they were doubtless formerly, the custodians of the dwelling of Thibetans, those of gold miners as well as of others. They attracted the special attention of Marco Polo, as well as of many other travellers in Thibet; and for a recent account of them reference may be made to Captain Gill’s *River of Golden Sand*. They are excessively savage, and attack

strangers fiercely, as I have myself experienced on the borders of Sikkim. This identification serves also to clear up certain of the details in the story of Megasthenes and Herodotus as to the gold-digging ants, which have been identified by Sir H. Rawlinson and Professor Schiern...with Thibetan gold miners and their dogs.'

C. xxxii. Describes Indian sheep and goats. For translation see *ibid.* (p. 38)

C. xxxvi. Describes a poisonous Indian snake. For translation see *ibid.* (pp. 48-49).

#### Insects :

C. xli. Describes an Indian insect called the *dikairon*, to the dung of which the properties of an opiate and poison were attributed. For translation see *ibid.* (pp. 50-51) Dr. V. Ball identified it with the *dung-beetle*.

C. xlvi. Describes an insect of the size of a beetle and of a red colour, which is found on the trees which produce amber, and which subsists on their fruit. What Ktesias, from whom Aelian quotes his description, calls amber, Dr. V. Ball identified with crude shell lac, a secretion which surrounds the female lac insect, whose body forms the material of lac-dye. For translation see *ibid* (pp. 55-53).

#### One horned wild ass :

C. lii. Describes the Indian one-horned wild ass after Ktesias. This wild ass has been identified with the rhinoceros, although it fails to satisfy some important points in the description. For translation see *ibid.* (pp. 54-56).

#### Huge worm :

Book V. ciii. Describes the skolex, a kind of huge worm, found in the river Indus, which yielded a very inflammatory kind of oil. Dr. V. Ball identified the animal with the garial or Indian crocodile, and the oil

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with the petroleum of the Punjab. The account is taken from Ktesias and translated in the *Indika* (pp. 56-59).

### Peacock :

C. xxi. Describes the peacock, ending with this remark :— 'Alexander, the Macedonian, on seeing these birds in India, was struck with astonishment, and so charmed with their beauty that he threatened the severest penalties against any one who should kill a peacock.'<sup>1</sup>

C. Iv. When the Indians set elephants to pull up a tree by the roots, these animals do not proceed to tackle the work till they have first given the tree a violent shake, and thus ascertained whether it can be uprooted, or that it is quite impossible for the thing to be done.<sup>2</sup>

### Snakes and elephants :

Aelian, Book VI. c. cxxi. In India, as I am told, the snake and elephant are fiercely antagonistic. The elephants, be it known, are wont to break off branches from the trees and eat them, and the snakes, aware of this, creep up the trees and covering over the hinder half of their body with the foliage, let the other half with the head hang loose like a cord. Now up comes the elephant to pluck the tender shoots, and then the snake darts at his eyes and digs them out—and having next wound itself round his neck, it lashes him with its hinder

1. Aelian has several notices of the Peacock. Those relating to the Indian peacocks will be found translated in the *Invasion of India by Alexander the Great* (pp. 362-63). Curtius (ix. i) relates that the banks of the Hydarotis (Ravi) were covered with a dense forest abounding with trees not elsewhere seen, and filled with wild peacocks.
2. Aristotle (ix. i) shows how elephants act in pulling down palm-trees. They push against them with their foreheads till they bend them down, and then trampling on them with their hoofs lay them flat on the ground.

half, and with the other it grips him tight, strangling the poor brute with a strange new kind of noose.<sup>3</sup>

### Poros and his elephant :

When Poros the Indian King was wounded in the battle in which he engaged with Alexander, the elephant on which he rode, though suffering itself from many wounds, did nevertheless with gentleness and caution draw out with its trunk the darts with which the body of Poros was pierced, and ceased not to do this until it observed that its master from the excessive loss of blood was becoming weak and ready to faint. Accordingly it lowered him slowly and gently and stood still with its knees bent in such a way as would prevent the body of Poros in descending to be thrown with violence on the ground.<sup>4</sup>

### Indian dogs bred from tiger :

(B. VIII. c i.) Contains a description of Indian dogs bred from tigers. A translation of the chapter is given in *The Invasion of India by Alexander the Great* (pp. 363-64).

### Elephants obeisance to the king :

Aelian Book XIII. C. xxii. An elephant trained for the purpose is the first to make an obeisance to the king of the Indians when he leaves the place to administer justice, and never forgets this duty, or refuses to perform it. Close by the animal stands its keeper, who gives it a reminder of the lesson it has been taught by a stroke of the goad, and by accents of the native speech which elephants through a mysterious endowment of nature peculiar to themselves are capable of understanding. They are also stirred by the war spirit as if

3. The snake here mentioned may perhaps be the python.

4. This incident is related in nearly similar terms by Plutarch (*De Solertia*, p. 480).

showing that they keep this lesson in mind. Four and twenty elephants are constantly kept as guards of the king's person, and they relieve each other in turn just like other guards. They are trained likewise not to fall asleep when on guards, for they are tutored even to do this by the skill of the Indians. Hekataios the Milesian relates that Amphiaraos the son of Aikles, being oppressed with sleep, neglected his watch and just escaped suffering what this writer mentions. But elephants are wakeful and as they are not overpowered by sleep, they are, next to men, the most faithful of all sentinels.

**Horses and elephants of great use:**

Aelian Book XIII. c. xxv. Horses and elephants being animals of great use in arms and warfare are held in the highest esteem by the Indians. In their king's service they fetch bundles of hay,<sup>1</sup> which they deposit in the stalls, and provender also which they bring home fresh and green undamaged. When the king finds their freight in this condition, he expresses his satisfaction, but if not, he punishes most severely the men in charge of the elephants and horses. Even very small animals are not beneath his regard, but he even accepts them when brought to him as presents; for the Indians do not look down with contempt at any animal whatever, whether it be tame or even wild. For instance subjects that are of rank offer the king such presents as cranes and geese, hens and ducks, turtle-doves and attagens,<sup>2</sup> pattridges and pindals<sup>3</sup> (pride like the attagens),

1. Gr. καμυθας Theocritus uses this word (iv. 18):

και μαλακω χωρυοτο καλαν χωμυθα διδωμι.

2. It is not certain what the bird of this name is. Some take it to be the *godwit*, others the *perdix cinera*, and others a kind of *grouse*. It is mentioned in Aristotle and in the *Birds* of Aristophanes.
3. No mention of this bird occurs elsewhere.

and others that are smaller than the above mentioned, such as bokalides and fly-catchers, and what are called kestrels. They show these below the features to prove the extent of their fatness. They give also animals which they have caught, stags and antelopes, and gazelles and oryxes and unicorn asses (of which I have made previous mention) and also different kinds of fish, for they bring even these as presents.

### Sheep and oxen rearing :

Aelian Book XVI c. vii. In India, and more especially in the country of the Prasians,<sup>1</sup> liquid honey falls like rain upon the herbage and the leaves of marsh reeds, and supplies sheep and oxen with an admirable kind of nutriment, the exceeding sweetness of which the animals highly relish. Now the herdsmen drive them to those spots where this delicious dew falls and lies, and the cattle in return supply the herdsmen with a delicious repast, for they yield a very sweet milk which does not require honey to be mixed with it as is done in Greece.<sup>2</sup>

### Catching of the pearl oyster :

The Indian pearl oyster (I have already spoken of the Erythraean kind) is caught in the following manner. There is a city which a man of royal extraction called Soras<sup>3</sup> governed at the time when Eukratides governed

1. The people of Northern Bengal and Bihar.
2. Polyainos (iv. 3. 32) speaks of cakes placed on the table of the King of Persia made 'of honey that fell in rain' *μελίτος τού νοτρού παλαθας* Diodoros in his seventeenth Book mentions a tree from the leaves of which honey distilled, *αποδε τών φυλλών απολειβον μέλι* and Nonnos (*Dionys.* xxvi. p. 451) says that in Arigantia of India a dew of honey lies on the leaves of trees in the morning. This aerial honey, as the Greeks call it, Wesseling compares with the maina with which the the Israelites were fed in the wilderness.
3. 'Sora, (says Bishop Caldwell (*Dravidian Grammar Introd*)'

the Baktrians,<sup>4</sup> and the name of that city is Perimuda.<sup>5</sup> It is inhabited by a race of fisheaters who are said to go off with nets and catch the kind of oysters mentioned in a great bay by which a vast extent of the coast is indented. It is said that the pearl grows upon a shell like that of a large mussel, and that the oysters swim in great shoals, and have leaders, just as bees in their hives have their queen-bees.<sup>6</sup> I learn further that the leader is bigger and more beautifully coloured than the others, and that in consequence the divers have a keen struggle in the depths which of them shall catch him, since when he is taken they catch also the entire shoal,

which we meet alone and in various combinations in these (Ptolemy's) notices represent the name of the northern portion of the Tamilian nation. This name is Chola in Sanskrit, Chola in Telgu, but in Tamil Sora or Chora. General Cunningham took the Sorai to be the Surai of the classical writers. Soras was no doubt the king of his people.

4. Eukratides was one of the most powerful of the Graeco-Bactrian Kings. He reigned from 181 to 147 B. C. He is mentioned by Strabo (XI, ix. 2; *ibid.* xi. 2; XV. i. 3) and coins of his have been found.
5. Perimude, in the form *Perimula*, is mentioned by Pliny as an Indian promontory and important seat of trade with a pearl fishery on its coast (vi. 20, and ix. 34). His Perimula, however, is situated on the west coast and has been identified with Simylla (Tiamula), now Chaul, twenty three miles south from Bombay. The Perimuda of Aelian, however, must be located somewhere on or near the more southern portion of the Coromandel coast.
6. The same thing is stated by Pliny (ix. 35 (55)), quoting like Aelian from Megasthenes. Ptolemy and the '*Periplus of the Erythraean Sea*' mention a place called Kolkhoi as an emporium of the pearl trade. It was the original seat of the Pandya dynasty, and was situated in Tinneveli.

now left, so to speak, forlorn and leaderless, so that it stirs not, and like a flock of sheep that has lost its shepherd, no longer moves forward against any incipient danger. As long, however, as the leader escapes and skilfully evades capture, he guides their movements and upholds discipline. Such as are caught are put into tubs to decay, and when the flesh has rotted and run off nothing is left but the round pebble. The best sort of pearl is the Indian and that of the Red Sea. It is produced also in the Western Ocean where the island of Britain is. This sort seems to be of a yellowish colour, like gold, while its lustre is dull and dusky. Juba tells us that pearl is produced in the straits of the Bosphorus and is inferior to the British, and not for a moment to be compared with the Indian and Red Sea kind. That which is obtained in the inferior of India is said not to have the proper characteristics, but to be a rock crystal. (Aelian, Book XV, C. viii.)

#### Tame tigers and domesticated panthers :

The Indians bring to their king tigers made tame, domesticated panthers, and oryxes with four horns. Of oxen there are two kinds—one fleet of foot, and the other extremely wild, and from (the tails of) these oxen they make fly-flaps. The hair on their body is entirely black, but that of the tail is of the purest white.<sup>1</sup> They bring also pigeons of a pale yellow plumage<sup>2</sup> which they aver cannot be tamed or ever cured of their ferocity; and birds which they are pleased to call kerkoronai,<sup>3</sup>

1. The kind of ox here mentioned is the *Yak*, from the tail of which *chowries* are made for flapping away flies.

2. Gr. *ωχρας*. Daimachos, a Greek ambassador at the court of Palibothra, states that in India there was a breed of pigeons of an apple-colour (*μηλων*). Athenaios, ix. p. 394.

3. This is an unknown bird.

as well as dogs of that noble breed of which we have already spoken and apes, some of which are white, and others again black. Those apes that are red-coloured they do not bring into towns, as they have a mania for women, and, if they assalt them, are put to death from the abhorrence roused by such a lascivious outrage. (Aelian, Book XV, c. xiv.)

#### Animal fighting :

The great King of the Indians appoints a day every year for fighting between men, as I have mentioned elsewhere, and also even between brute animals that are horned. These butt each other, and with a natural ferocity that excites astonishment, strive for victory, just like athletes straining every nerve whether for the highest prize or for proud distinction, or for fair renown. Now these combatants are brute animals - wild bulls tame rams, those called *mesoi*, unicorn asses, and hyaenas,<sup>1</sup> an animal said to be smaller than the antelope, much bolder than the stag, and to butt furiously with its horns. Before the close of the spectacle, elephants come forward to fight, and with their tusks inflict death wounds on each other. One not unfrequently proves the stronger, and if not unfrequently happens that both are killed. (c. xv.)

#### Venerated snake :

When Alexander was assaulting some of the cities in India and capturing others, he found in many of them, besides other animals, a snake, which the Indians, regarding as sacred, kept in a cave and worshipped with much devotion. The Indians accordingly with every kind of entreaty implored Alexander to let no one molest

1. The whole of this passage is corrupt, and all attempts to amend it have proved abortive.

the animal, and he consented to this.<sup>1</sup> Now when the army was marching past the cave, the snake heard the sound that arose (that kind of animal being very sharp both of hearing and sight), and hissed so loud and emitted such gusts of rage that every one was terrified and quite confounded. It was said to be seventy cubits long, and yet the whole of it was not seen, but only its head that projected from the cave. Its eyes, moreover, are reported to have equalled the size of the large, round Macedonian shield. (Aelian, Book XV, c. xxi.)

**Particulars about parrots :**

I hear that parrots are birds found in India, and I have made mention of them already; but some particulars which then omitted, I take the opportunity of setting down here. There are, I am told, three kinds of them. All of them, however, taught like children, become like them able to talk and utter words of human speech. In the woods, however, they emit notes like those of others birds, but do not utter sounds that are significant and articulate—for without teaching they cannot talk. There are also peacocks<sup>1</sup> in India, the largest of their kind anywhere found and wood pigeons with pale-green feathers, which one ignorant of ornithology on seeing for the first time would take to be parrots and not pigeons. They have bills and legs of the same colour as Greek partridges. There are in India cocks also of the largest size, with crests not red-coloured like those of our cocks at least, but many-hued like a coronal of flowers. Their rump feathers are neither curved nor curled, but broad, and they trail them as peacocks do their tails when they do not lift and erect

1. Compare Strabo XV. i. 28.

1. Regarding peacocks in India, see *Invasion of India by Alexander the Great*, pp. 362-63.

them. The plumage of these Indian cocks is of a golden and a gleaming azure colour like the smaragdus stone.<sup>8</sup> (Aelian, Book XVI, c. ii.)

### Various other animals:

From c. iii. to xxii. inclusive, Aelian describes various animals found in India and its seas. These chapters (with the exception of c. vii., which does not relate to India) will be found translated in my *Indica of Megasthenes* pp. 159-174. The bird called in c. iii. the *Kerkion* is the *Maina*, which can be taught to speak like a parrot. The *Kelas* of c. iv. which Gesner identified with the *Pelican* is more probably the *Adjutant*. The *Phaltages* of c. vi. some identify with the scaly ant-eater or *Pangolin*, but Dr. V. Ball takes it to be rather either the land-lizard *Varanus* or the water-lizard *Hydrosaurus*. The long-tailed monkeys of c. x. Dr. V. Ball identified with the Madras langur. The wild ox of c. xi. is the *Yak*, the tail of which makes the fly-flapper. The cave in Areiana of c. xvi. may be the wonderful cave at Bamian.

C. xxxi. Describes a fabulous Indian race — the *Kynamolgoi*, ie. the Dog-milkers. For translation see *Indika of Ktesias*, pp. 336-7.

C. xli. Describe the winged scorpions and snakes of India. For translation see *Indika of Megasthenes*, p. 68.

### Bigger and smaller snakes:

Kleitarchos<sup>1</sup> informs us that there is in India a snake of sixteen cubits length. He asserts, moreover, that there exists another kind of snake of a different

2. Dr. V. Ball has identified this bird with the Monal pheasant.

1. Kleitarchos the son of Deinon the historian accompanied Alexander in his eastern expedition, and wrote a history of it which was considered wanting in point of accuracy and was otherwise held in little estimation.

species from the rest. These are much smaller, and are marked with a variety of hues as if they had been painted with dye-stuffs. For while some have copper coloured stripes running from head to tail, others are of a silvery tint, others of a red, and others gleam like gold. This writer says that the bite of this snake kills very quickly.<sup>2</sup> (Aelian, Book XVII. c. ii).

### The Orion :

Kleitarchos tells us that in India there exists a bird which is extremely erotic, and which he calls, if I remember right, the Orion. Let me describe it in his own words. The Orion is of the size of a heron and its legs are red like the legs of that bird, from which, however, it differs in having blue eyes.<sup>3</sup> The Orion has

2. These may perhaps be the snakes mentioned by Diodoros (xvii. 90). See *Invasion of India*, p. 278.

3. This passage from Kleitarchos is noticed by Strabo (xv. i. 69) along with that which follows regarding the *Katreus*. Nonnus in his *Dionysiaca*, Book xxvi. 201. 214, has thus versified the account here given of the Orion and Katreus. 'Where perched on a honey-dropping spray, that sweet bird, the Horion, like the melodious swan strikes up no piping strain such as the zephyr-gale gives forth from its tuneful wings, but with its melodious throat it warbles such notes as minstrel at a bridal strikes on the strings of his harp, when he awakes the nuptial song. The Katreus again prinked with yellow and with wings of yellow grain utters its shrill voice prophetic of the coming rain, and from beneath its eyelids darts out dazzling gleams that rival the early rays of the rising morn. Ofttimes from some breezy tree-top may be heard its clear-ringing voice entwining, in concert with a neighbouring Horion, a malifluous chant. On hearing the morning song which it so sweetly warbles, you might swear that 'twas the songstress with the neck of changeful hue, the nightingale herself, weaving at break of day her blithesome carol.'

been taught by Nature to warble melodious notes as exquisitely sweet as the strains of a hymenaeal chant, which like the song of the sirens soothes the ear with its soft cadences.<sup>4</sup> (Aelian, Book XVII, c. xxii.)

**The Indian bird Katreus :**

Kleitarchos states that the Indian bird called the Katreus is of surpassing beauty, being about the size of a peacock, while the tips of its feathers emulate the green of the emerald. When it is looking at others, you could not tell the colour of its eye, but when it is looking at you, you would say its eye was vermillion, except the pupil, which is coloured like the apple, and shoots a keen glance. That part of the eye which in all others is white, in the case of this Katreus is of a sallow hue. The downy plumage on its head is azure and marked with spots of a saffron dye, scattered one here and another there, while its legs are of a deep red. Its voice is melodious and thrilling like that of the nightingale. The Indians were wont to keep these birds in avaries in order that spectators might be able to feast their eyes with their beauties. Other birds are also to be seen there with plumage all over purple, and red as the purest fire, and these fly together in such numbers that one might take them for clouds. There are besides various other kinds of birds, the characteristics of which it would not be easy to describe and there are matchless for the melodious notes of their throat and tongue, so that (without saying what is too absurd) they are sirens, or nearly so, for the mythical maidens so named are represented alike in the song of the poet and the picture of the artist, as winged and having the legs of birds. (Aelian, Book XVII, c. xxiii).

4. This passage in the original Greek is very corrupt. I have given what appears to be the sense.

### Apes:

Kleitarchos says that in India there are certain kinds of apes which are of various colours and of immense size, and that in the mountainous regions they are so huge, that, according to his story, Alexander the son of Philip on seeing them was thrown into quite a panic, even his army with him; for when he saw their multitude he thought that what he beheld was a force lying in wait for him. It so happened that the apes were standing upright just at the time when they came into view. These creatures are not caught with nets nor by hounds of great sagacity in scenting and running down their game. The ape, you must know, has a strong propensity for imitation; thus, if it sees one dancing, it too must dance, and if it sees one playing on the flute, it cannot but try whether it has skill enough to put wind into the instrument. Should it, moreover, see some one putting on shoes, it imitates this act, and should it see another painting his eyes with ochre, this also it must needs do. The hunters then, knowing all this, place in their view heavy shoes made of lead, and thereunder put nooses for the apes to put their feet into, and thus be held in a trap from which there is no escape. Instead of ochre as a lure for their eye, birdlime is sometimes placed before them. A mirror is also employed by the Indian while the apes are watching him, and on retiring he takes the mirror with him, but leaves others that are different, and to these also he attaches nooses of great strength, and thus is the trap set. Now up come the apes, and in their simplicity look into the mirrors in imitation of what they had witnessed. So then, either the strength of the birdlime seals up their eyelids and deprives them of sight, or the repercussion of the Sun's rays blinds them with the glare.

When their sight is thus gone, they are very readily caught taking to flight being no longer in their power.<sup>1</sup> (Aelian Book XVII, c. xxv.).

**Lions :**

I have no reason whatever to doubt that lions of the largest size are found in India, and what convinces me is that this country is such an excellent mother of other animals. But of all the beasts that one can encounter these are the most savage and ferocious. The skins of these lions look black — the bristly hair of their mane stands erect, and their very aspect strikes the soul with terror and dismay. If they can be captured before they are full-grown and not otherwise, they can be led by the leash, and with the huntsmen and their hounds take part in hunting young deer and stags, and boars and buffaloes and wild asses, for, as I am told, they have a very keen scent.<sup>2</sup> (Aelian, Book XVII, c. xxvi).

B. XVII, c. xxix. Is an extract from Ktesias concerning elephants. For translation see his *Indika*, p. 35.

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1. Somewhat similar account of the mode of catching these apes is given by Diodoros (xvii. 90). For translation see *Invasion of India*, pp. 277-78.
2. It is the panther that is used in India for hunting, and not the lion.

## NOTES

pp. 11ff. India—Shape, size, and boundaries :

Herodotus calls India the 20th division of the Persian empire, but real India extended far beyond the eastern limit of the Archaemenian kingdom, as is evident from his reference to many nations of Indians speaking different languages. The India of Herodotus was gradually acquiring a wider denotation, as suggested by the size, the length and breadth of the country, and as noticed by the Greek historians who accompanied Alexander and the later ones who wrote about India. The early Greek writers had regarded the Indus as the western boundary of the country, but there were Indian settlements in the valley of Kabul and its tributaries. It is suggested that the river Kophes (Kabul) was the farthest limit on its west which would mean the inclusion of Yonas or Yavanas who probably occupied the region near about the river Kabul.

west, the course of the Indus from Ohind, above Attok, to the sea is 950 miles by land or about 1200 miles by water. On the north, the distance from the banks of the Indus to Patna, which measured by Schonei along the Royal road was 10,000 stadia or 1149 miles as given by Strabo on the authority of Megasthenes, is only 6 miles more than the actual measurement of 1143 miles; from Patna or Palibothra the distance was estimated at 6000 stadia or 689 miles which is only 9 miles in excess of the actual length of the river route. The eastern coast and mouth of the Ganges to Cape Comorin which was reckoned as 16,000 stadia or 1838 miles is a little more as the actual distance measured on the map is 1600 miles. This increase could be accounted for if we take into account the numerous indentations on the coast line. From Cape Comorin to the mouth of the Indus there is considerable discrepancy of about 3000 stadia or nearly 350 miles between the stated distance and the actual measurement on the map. This may be accounted for by the deep indentations of the two great gulfs of Khambey and Cutch which alone would be sufficient for the greater part of the discrepancy (Ref. Cunningham-Ancient Geography of India abb CAGI pp. 3ff).

The shape of India is also described in Ancient Indian literature. According to the *Mahābhārata*, India was an equilateral triangle which was divided into four smaller equal triangles. According to Cunningham, the apex of the triangle is Cape Comorin, and the base is formed by the line of the Himalaya mountain. As no dimensions are given, and no places are mentioned, Cunningham drew a small equilateral triangle on each of its line between Dwarka, in Gujarat, and Ganjam on the eastern coast. By repeating this small triangle on each of its three sides, to the north-west, to the north-east, and to the south, one could obtain the four divisions of India in one large equilateral triangle. The shape thus corresponds very well with the general form of the country if we extend the limits of India to Ghazni on the north-west, and fix the other two points of the triangle at Cape Comorin, and Sadiya in Assam (CAGI. p. 6).

According to the early Buddhist writers, India is broad in the north, whereas in the south it has the form of the front portion of a cart, and is divided into seven equal parts (Digha

the west to Prayāga in the east. The eastern boundary gradually extended so as to include places which were outside Āryāvarta proper. The *Mahāvagga* (Vol. V. pp. 12-13) includes Kajaṅgala (identified with Ka-chu-en-ki-lo) of Hiuen-tsang in Majjhimadeśa, while the *Divyāvadāna* (pp. 21-22) extends the eastern boundary of this division as far as Mahāśāla (Puṇḍravardhana in North Bengal). The Āryāvarta excludes the greater portion of the land of the Rigvedic Aryans which is included in the Uttarāpatha or Udīcya, viz Northern India (cf *Vasishṭha*, *Baudhāyana* and *Manu*). The Greek writers seem to have in mind only the geographical vision of the Udīcya or Northern India and Āryāvarta or Majjhimadeśa i. e. Central India. Alexander's historians were also posted with the geography of Sind which is placed in Western India according to the Indian geographers.

The division of Into five provinces was also adopted by the Chinese who borrowed it from the Brahmanical system as described in the Purāṇas with slight modifications. These are called the Five Indies (Cunningham : Op. Cit).

**pp. 24 ff. Mountains, Rivers and Plains :**

India occupies a position of isolation with the sea on its three sides, and the impregnable Himalayas in the north. It enjoys the most favourable position. *Hemavata*, Pāli *Himavā* *Himācalā* and *Himavantapadeśa*, Sanskrit *Haimavata*, from which issue the rivers of the north, is mentioned in Indian literature, while the Greek writers have mentioned only some of its peaks. The *Himālaya* which is the loftiest mountain range in the world forms a circular arc with the Indus in the west and the Brahmaputra in the east. It consists of three almost parallel ranges of various altitudes. The greater Himalaya comprising the north most range rises to over 20,000 feet above the sea-level with its manifold peaks numbering more than 100. The lesser *Himālaya* consists of the southern spurs of the Great *Himālaya* and the ranges of the lower elevations running parallel to it extend as far as the outer Siwalik ranges with its breadth only 50 miles. The Pir Panjal extends eastward from the south of the Kashmir valley across the source of the Beas joining the great *Himālayan* range a little farther east. The outer *Himālayas* consist of low hills which run almost parallel to the Great *Himālayan* range from the Indus to the

Brahmaputra. On the west it is known as the Siwalik hills extending for about 200 miles from the Beas to the Ganges. (See Law : *Op. cit* pp. 16ff)

The Himalayan rivers, of which the two main rivers mentioned by the Greek historians are the Indus and the Ganges, cut through the main chains in the deep transverse gorges after long flowing parallel to the trend of the chain of the Himalayas. The innumerable rivers, which are really the arteries, carry and distribute the water flowing in various directions all naturally towards the sea. The prosperity of India depends to a large extent on her river systems. The course of the Ganges, described by the Greek historians as descending from the mountainous country, turning eastward upon reaching the plain, and then flowing past Palibothra pursuing its way to the sea, is in agreement with the account of the sacred river as noticed in Indian sources. With its 19 tributaries mentioned by the Greek historians, Ganges is known by several other names in Indian literature: *Vishnupadi*, *Jahnavī*, *Mandakī*, *Bhāgirathī*, etc. (Law, *Op. cit.* p. 31). According to the *Mahābhārata*, its source may be traced to Bindusara, while according to *Jambudīvapannati* to the Padmahrada. The *Bhāgirathī* first comes to light near Gangotri in the Garhwal territory, and at Deo Prayag it is joined on the left side by Alakanandā. The joint stream called Ganges or *Gangā* enters rapidly at Hardwar known as *Gangādvāra*, and then follows a sourthernly course as far as Bulandsahar after which it flows in a south-easterly direction up to Prayag where it is joined by the Jumna. The easterly course is continued from Allahabad down to Rajmahal from where it follows a south easterly direction. The Ganges in its lower course is known as the *Bhāgirathī-Hugli* in West Bengal and the *Padmā-Meghbrā* in East Bengal. It enters Bengal in the district of Murshidabad. The water of the river is carried to the sea through several other channels besides the *Bhāgirathī* and the *Padmā*, and the seaward end of the Delta encloses the large swampy area covered with jungles called the *Sundervans* (See. Law. *Op. cit*).

The Indus, known to the Indians as *Sindhu*, is as old as the Rigvedic times (*Vedic Index* Vol. II, p. 450), and is counted among the seven rivers or streams of *Dityagaṅgā* or celestial

Gāṅgā. The Indus at the start is a united flow of two streams, one flowing north-west from the north-west side of the Kailāśa mountain and the other in a north-westerly and then in a south-westerly direction from a lake situated to the north-east of Kailāśa. Beginning from this confluence it flows north-west over a long distance and turning south below the Karakoram range, it follows a south-westerly course to fall in the Arabian sea forming two well-known deltas at its mouth. The Sindu group, as known to Pliny, consisted of this river and nineteen others, of which the most famous was the Hydaspes or the Jhelum with its four tributaries. The Indus was generally considered as the western boundary of India by many Greek writers. According to Arrian, it spread out in many places into lakes with its wider shores. This river was supposed to be the greatest, and it surpassed all others. According to Al-Biruni. (Sachau Vol. I. p. 260) only the upper course of the Indus above its junction with the Chenab (Chandrabbhāgā) was known as the Sindhu; lower than that point as far as Aror, it was known by the name of Pañcanāda, while its course from that point down to the sea was known as Mihran. It is noticed in the Behistan inscription of Darius as Hindu lending its name to the country through which it flows. The *Nadi-stuti* of the Rigveda mentions a large number of its tributaries to the east and west, some of which are also noticed by the Greek writers. The Kubhā; the Kophes of Arrian, the Kophen of Pliny, the Kea of Ptolemy, and the Kuhū of the Purāṇas, is undoubtedly the modern Kabul. It flows into the Indus, a little above Attok with its two tributaries, the Suvāstu or Swat, the Soastas of Arrian, and Gaurī (Garroia of Arrian), identified with the Panjkhora, and also bringing with it another river called Malamantos by Arrian, probably represented by the Kameh or Khonar, the largest of the tributaries of the Kabul river. The Gomati, identified with the modern Gomal, is the other western tributary of this river. The eastern tributaries of the river Indus are also noticed by Greek historians, and there is no difficulty in identifying them. The contributions of Rennel, Wilford, Schlegel, Lassen, and others were reviewed by M. de. St Martin, and McCrindle, and the notes supplied by the latter are comprehensive enough. The reference to these rivers in ancient

Indian literature are found in the *Vedic Index*, and Dictionary of *Pali proper names*; and these are also collected in Law's *Historical Geography of Ancient India*, and in his 'Rivers of India.' See also the chapter on the Physical aspects in the *Imperial Gazetteer of India* Vol. I.

pp. 55ff. Social Divisions :

These divisions seem to be based on occupations, but birth was to a greater extent responsible for following the family vocation. Caste determined the craft of a person. Vocational mobility was, however, possible, and there are numerous instances of members of the upper castes following the professions of the lower groups. but not vice-versa.; as for example, Brahmins cleaving wood (*kāsthabhid Brāhmaṇas*) (*Patañjali-Mahābhāṣya*-III. 4. 67). When a Brahmin failed in his literary and spiritual attainments, birth alone entitled him the place in his social group. (*jāti brāhmaṇa*) *Mahābhāṣya* (III. 4.69). Manu has also framed ordinances regarding the adoption of vocations by members of higher classes in distress (X. 81; cf. *Viṣṇu* 11.15). Instead of the usual four divisions of Indian society in ancient times, the Arab historians, like the Greeks, also mentioned several such divisions of society (See the accounts of Ibna-Khurdadba, Al-Idrisi, Marvāzi, collected and annotated by Elliot and Dowson in 'History of India', as told by its historians Vol. I—These castes are *Sabkufria*-from which kings were chosen, the *Brahma*, evidently Brahmins, *Kataria* the Kṣatriyas; *Sudaria* who were by profession husbandmen; *Basura*, Vaishyas, who were artificers and domestics; *Sandalia* who performed menial offices, and *Lahud* mentioned as *Zahiya* by Al-Idrisi who calls them jugglers and players on various instruments; and *Dubbiya* (*Domba*) by Marvāvi. The subject has been discussed in my 'India in the time of Patañjali', and also in my 'The history of the Gurjara-Pratihāras'; For the original sources on caste, see the *Index volume of the Sacred Book of the East* by Winternitz pp. 138 ff; and also *Encyclopedia of Religion and Ethics*. Numerous authors have worked on the original sources. A comprehensive bibliography and detailed treatment is given in Prabhu's *Hindu social organisations*'.

pp. 68 ff. **Philosophers :**

The usual division of Indian ascetics into Brāhmaṇas and Śramaṇas is mentioned in Aśokan inscriptions as well. The Mauryan emperor not only accords them an equal status, but also enjoins his people to respect them. The term Brāhmaṇa, according to the Greek writers, suggests Brahmin ascetics, either as Brāhmaṇārīs who studied till the age of thirty-seven undergoing all possible discomforts, or those of the fourth stage of life, called Sophists by Arrian who went about naked, living in open air and eating only fruits and barks of trees. The Sarmanes, i. e., Śramaṇas probably included both Buddhist and Jain ascetics. There is ample literature dealing with the ascetics, including the Sanyasis, Bhikṣus, Parivrājakas, Munis, and wandering mendicants. According to Elphinstone, religious ascetics are spoken of under the different names of Brachmanes, Germanes, and Sophists; but it does not very clearly appear whether they were merely Brahmins in the last two stages of their life, or whether they were members of regular monastic establishments. Many of their austerities might be reconciled to the third portion of a Brahmin's life, when he becomes an anchorite; but their ostentations, mortifications, and several other considerations lead rather to a conclusion that they belonged to the monastic order. (*The History of India*, 1911).

pp. 71ff. Hylobioi is a literal translation of *Vānaprastha*, "dweller in the woods" which is the usual designation of a Brahmin in the third stage (Calcutta, Oriental Mag. Mar, 1827). The Hylobioi might be the Ājīvikas (For consolidated references to the Ascetics, please refer to Winternitz *Index Volume* of SBE. pp. 65 ff. The subject is also treated with fuller references in the *Encyclopedia of Religion and Ethics* Vol I; and also by A. L. Basham in his book on the Ājīvikas. A note of Indian sages also appears in McCrindle's: *The invasion of Alexander the Great* pp. 358-62.

p. 87 Sandanes. See F. W. Thomas's paper on 'Sandanes, Nahāpīna, Castana and Kaniska published in 'New Indian Antiquary' Vol. VII. nos 5 and 6, 1944. He contradicts Sylvain Levi's views that Sandanes might correspond to a form Candana which represents a title borne by Kaniska.

**p. 99. Election of king :**

The position of the king, his election, rights and obligations are noticed in detail in the *Mahābhārata*, and also in the *Smritis*. Consolidated references can be traced in Winternitz's, *Index Volume of SBE*. pp. 322 ff; and also in Jayaswal's *Hindu Polity*. References to the election of the kings, and the exercise of power by the people over their monarch are found in the *Mahābhārata*. The cases of Pratīpa and Yayāti may be mentioned here. In the *Śāntiparva*, tradition relating to the election of the first king by the people is recorded. This seems to have continued, as we find Rudradāman of the Girnar inscription being elected king by people of all castes whom he promised to protect. (E. I. Vol. VIII) p. 100.

**Choosing of husband and wife :**

This is one of the eight recognised forms of marriage, called *Gāndharva* in which both the parties have pre-nuptial relations. (Manu. III. 32)

**p. 103. Food and Drinks :**

In Patañjali's *Mahābhāṣya* *sāli* (a rice of ten varieties), *hāyana*, (a sort of red rice), *yava* (barley), and *ṣaṣṭaka* (another kind of rice ripening in sixty days) are mentioned as items of staple food, besides pulses like *mudga*, *rājamaṣa*, and *māṣa*. (op. cit. p 94). Pliny refers to a cultivated and a wild barley, from which excellent bread as well as a kind of pottage were made (Book XVIII. c. 13). In Sanskrit Buddhist literature we find reference to flour (*saktu*), rice (*odana*), barley (*yava*) and numerous other items (*Sadharmaśaṇḍisrīka*) IV. p. 108; *Divyāvadāna* 539-8; *Lalitavistara* XII. p. 149). According to Patañjali, once again, the favourite vegetarian dish was that of boiled rice, called *odana*, also known as *bhakta* which was sometimes cooked with meat (*mānsaudana*) and was well-relished. (op. cit. p. 95). Megasthenes's reference to rice pottage as principal item of food, might be true of east Indian people, especially of Bengal, Bihar and Orissa where rice is still the staple food. Drinks, both soft and alcoholic, were enjoyed by the people-like *surā* distilled from molasses and a spirituous liquor made of rice called *prasanna* which often had only substance in it, and *śuṇḍā*-another form of spirituous liquor. (op. cit. p. 98). Pāṇini also mentions a religious drink

prepared by the priest known as *āśutitala* (V. 2. 112). A Brahmin lady, according to Patañjali, indulging in drinking incurred the risk of losing the company of her lord in the next world. (*Mah.* 2. 8. p. 99). That shows that the ladies also drank sometimes, though in private. Patañjali also refers to table manners, as for example, the servers were not expected to partake while the guests were eating. He also refers to a common meal called *samāsa* (I. i. 50. p. 123) which probably implied taking food on the same table, or in the same row on the floor.

p. 105. **Witnesses :**

On the question of punishment accorded to false witnesses, Kauṭilya quotes both Manu and Brihaspati. The latter is very strict, as he prescribes death by torture for such a person who rendered the case suspicious. There is a long chapter on deposits and pledges in Kauṭilya's *Arthāśāstra* (pp. 177 ff; *Trans.* pp. 201 ff).

p. 105. **King's life :**

In the first Book of Kauṭilya's *Arthāśāstra* there are a number of chapters dealing with the life of a king, the life of a saintly king, the duties of a king, his personal safety and that of the princes. References to the duties of the king and his daily routine are also noticed in the *Mahābhārata* (See Chap. XC-XCL) of the *Santiparva* and also II, 5. 29; V. 5. 11 etc etc. A comprehensive list of references under King is given in the *Index Volume of the Sacred Books of the East.*) In the chapter on personal safety (Book I. xxi), Kauṭilya also refers to troops of women armed with bows, posted near the bed chamber followed by Kañcukī (presenter of the king's coat), the Uṣṇīṣā—presenter of King's headdress, and other harem attendants, in the second compartment; the crooked and dwarfish persons in the third, and the Prime Minister, kinsmen, and door-keepers with missiles in their hand in the fourth compartment.

p. 107. **Girl's Price :**

The acceptance of money by the father from the prospective bridegroom is a pre-requisite to the *Asura* form of marriage. It is, however, condemned by Manu (III. 51). But it did not cease to exist. The *Milindapañha* refers to choosing a girl and paying a price for it (p. 47). The price paid for was called *Śulka*.

p. 107. **Sati :**

In India women attach great importance to their conjugal obligations. This was carried to the extreme and they preferred self-immolation rather than lead the life of disgrace in the absence of their husbands. This fact was responsible for the custom of *Sati* which continued in India till the early part of the Nineteenth century. It is noticed in ancient Indian literature *Viṣṇu*, SBE 7. p. 11; *Manu*. SBE. 25 p. 196). Its reference in a 9th century record from Dholpur (Rajputana) is significant (See ZDMG XL. p. 39 ff). McCrindle also wrote a note on it (*The Invasion of Alexander the Great* No. I).

p. 107. **Offering of virgin as prize :**

The offering of virgin as prize to the victor is evident from the case of Arjuna's winning the hand of Draupadī after exhibiting his superiority in archery at the Pañcāla court. The same thing happened earlier in the case of Rāma at the Vaidehan court. The *Lalitavistara* also refers to the family custom of giving daughter in marriage to one proficient in arts (XII. p. 143).

p. 111. **Indian dress :**

On the subject of the dress of the Indian people, the literature and art of the period from 2nd century B. C. to 3rd century A. D. offer detailed information. Clothing was used, primarily to cover the body. It consisted of three items, the lower garment called *upsamvyāna* corresponding to modern *dhoti* or loin cloth which is generally white (*śukla*); the upper cloth covering shoulders was called *pāṭa* and it was also white (*pāṭah* *śuklah*) as distinct from the red turban (*lohit* *uṣṇīśah*). Both cotton (*karpāsa*) and wool (*ūrṇa*) were used and the sewing of clothes was done through a sharp needle (See my *India in the time of Patañjali*, p. 103). Leather shoes (*upanah* *carma*) as well as wooden sandals (*upanah* *dāru*) were also used. The ladies' dress consisted of a skirt, generally white (*śulkeka* *sāti*) and *pāṭa* for covering the body. The clothes was also dyed. Patañjali also refers to people remaining shaven-headed or keeping beards (I. 1. 2. p. 43). In his *Saundarananda* Aśvaghoṣa notices dress for merry-making (IV. 38), dress for mourning (IV. 53), and also perfuming of clothes (IV. 26). The *Lalitavistara* mentions fine cotton silk from Kāśī (*Kāśikavāstra*) (VII. p. 83);

and cotton clothes *tūlapansi* (XV. p. 203). A dress of thin texture and blue colour is also noticed in this work (V. p. 41).

As regards ornaments, Patañjali mentions *rūcaka*, *kataka*, *svastika* and *kundala* (*op. cit.*). Aśvaghoṣa mentions *nūpura*, anklets, *kuṇḍala*-ear rings, and *hāra*-pearl necklace (*Saun* IV. 19; VI. 5). The use of ivory was also known. The *Jātakas* mention ivory workers located in Vārāṇasī (I. 320; II. 197). A Sāñchi inscription (No. 200) refers to workers in ivory from Vedisā who had organised themselves into a guild.

**p. 111. Animal racing :**

Animal racing was a popular recreation for the Indians and dates back to the Vedic times. *Āji* is mentioned in the Rig-Veda (V. 37. 7; VI. 24. 6) and also in the literature of the later period to express the sense of 'a race'. Horse-racing, according to Zimmer, was one of the favourite amusements of the Vedic Indians. References to race course called *Kāṣṭha* with the prize (*dhana*) offered and eagerly competed for, and the swift steeds (*vājin*, *atyā*) are collected by Macdonell and Keith. in *Vedic Index* Vol. I. pp. 53-55; 388; Ibid Vol. II, 280, 281, 426. Agni is invoked for victory in horse-races (SBE. Vol. 46, 16).

**p. 114. Animals for conveyances :**

Patañjali refers to horses, camels and even asses being used in carts (*āśvaratham*, *austraratham* and *gardabharatham* (*Mahābhāṣya*. IV. 3. 120 p. 318; Patañjali. *Op. cit.* p. 140). People also used a she-elephant (VIII. 1. 56 p. 378). The *Saddharmaśūḍarīka* also mentions chariots, elephants, horses and foot boys as carriers (IV. 102).

**pp. 115ff. Agricultural operations :**

India is an agricultural country and the majority of her population depends on land. Details of agricultural operations, including the nature of the land, its fertility, sowing, ripening, cutting of crops, and facilities for storage are noticed in Indian literature. The Greek historians have given a correct picture in their extracts. Patañjali has furnished comprehensive details—the ploughing of fields (*rahana*) by the plough (*sīra*) with a view to weeding out the stumps in the ground (*trīṇa*), the sowing of the seeds, and the quantity required, the auspicious day of sowing, periodical supply of water through channels

(*kulyā*) and ripening and reaping of crops (*lavanya*) with a sickle (*datra*), the storage on the threshing floor (*khala*) and its moving through a winnowing fan (*sūrpa*), and finally its storage (Patañjali. *Op. cit.* p. 123 ff.). The Buddhist literature of more or less contemporary period also furnishes interesting details, as for example, the sowing of seed according to particular crops (*Saun* XI. 127), the removal of defects in the soil (*Mil.* p. 360) ploughing, sowing, irrigating, fencing, watching the crop, reaping it, and finally grinding the corn are all mentioned (*Mil.* p. 360). The rice field was provided with canals for irrigation (*Mil.* p. 4) and embankments for storing water (*ibid*).

**p. 120. Medicinal plants and roots :**

In Rock Edict II Aśoka refers to the establishment of botanical gardens for the cultivation of the medicinal plants, herbs, roots and fruits for the relief of suffering of both man and beast.

**p. 122. Indian artisans :**

The Indian artisans and their contribution to the economic life and prosperity of the country are well-known. The professions of potters (*kumbhakāras*) and weavers (*tanturāyas*) are very old. Patañjali refers to five artisans known as *Pañcakāruki*-potter (*kulāla*), artifice or blacksmith (*karmāra*) carpenter (*vardhakin*), barber (*nāpita*), and washerman (*rajaka*) in a village (I. 1. 48. p. 118). He also mentions weavers (I. 1. 11. p. 112). The bronze-utensil maker was called *tattakāra* (*Mahāvastu* II. 470). Mechanics were known as *yantrakāras* (*ibid* p. 477), and the comb makers *kocchakāras* (*Mil.* p. 331).

**p. 123. Gold-Digging ants :**

McCrinde in a long note on the Gold-Digging ants No. H. *Invasion of Alexander* remarks that the gold-digging ants were neither, as the ancients supposed, an extraordinary kind of real ants, nor as many learned men have since supposed, larger animal mistaken for ants, but Tibetan miners. The mistake is due to the understanding of the Sanskrit word *pippilika* which denotes both an ant, and a particular kind of gold. The gold mines probably lay in the country of the Dards, consisting of several wild and predatory tribes settled on the north-west frontier of Kashmir and by the banks of the Indus. The gryphons who

guarded the gold were Tibetan mastiffs, a breed of unmatched ferocity. Gold is still found there (See *Imperial Gazetteer of India* Vol. III). The process of purifying gold is described by Asvaghoṣa in his *Saundarananda*. (XVI. 65-66).

p. 127. Indian minerals :

There is a big chapter on minerals and precious stones in the *Imperial Gazetteer of India* Vol. III. India has been famous as the producer of jewels for a long time which were also exported. The author of the 'Periplus' also gives a long list of items for export and import. (Sec. 56). India and Ceylon were the source of production of precious stones of all kinds which were exported to all parts of the world (Schoff's note. p. 222). These are classified as follows; The Beryl group, Diamond, Pearl, Ruby, Sapphire, Spinel, Topaz, Turquoise, Garnet, Jade, and Jadeite, Lapis — Lazuli, Quartz, (See also Lassen I. 229-43; Travernier II). The only precious and semi-precious stones at present found in India are the diamond, ruby, sapphire, spinel, tourmaline, garnet, rock-crystal, and the various chalcedonic forms of silicia, jadeite, and amber (*Imp. Gaz.* III. p. 160). *The positive background of Hindu Sociology* Book I, Chap. IV on the data of Ancient Indian Mineralogy pp. 60 ff. For the archaeological discoveries of ancient jewelleries, the following works may be consulted: *Index Volumes to Archaeological survey reports*; Marshall; *Taxila*. 3 volumes, K. K. Ganguli: *The Harappa hoard of Jewellery*, In *Ind. Cul.* VII, 1939-40 pp. ff; *Jewellery in Ancient India*. *Jour. Ind. Soc. Or. Art.* 1942; and also K. K. Ganguli's work on 'Ancient Indian Jewellery.' The ancient Indian literature also offers interesting evidence. In the *Mricchakaṭika* there is a scene which includes a row of jeweller's shops where skilful artists are examining pearls, topazes, sapphires, beryls, rubies, lapis-lazuli, coral, and other jewels; some set rubies in gold; some work with gold ornaments on coloured thread; some string pearls, some grind the lapis-lazuli, some pierce shells, and some cut-coral (Ryder. Trans; quoted from Schoff; op. cit.). He also gives a detailed note on transport stone. The jeweller (*manikāra*), jewel splendourer (*maniprastaraka*), and dealer in pearls (*muttaratanam* = *muktāratnam*) played an important part in ancient

Indian economy. They are noticed in literature and inscriptions and had also a *manikāra* guild.

p. 161. **Achaemenian exploration :**

For a complete history of the Achaemenian occupation of the North-western tip of India in the sixth century B. C, the following works may be consulted: *Cambridge History of India* Vol. I Chapter XIV pp. 319-341. in which a complete bibliography is also given; F. W. Thomas: *Sakastana* JRAS 1906 pp. 181-216; V. A. Smith: *Early History of India* Foucher: *L'art Graeco-Bouddhique du Gandhāra* Vol. II p. 407; Poussain: *L'Inde aux temps des Mauryas* in which the subject is discussed in detail. D. P. Spooner: *The Zoroastrian Period of Indian History*. JRAS 1915 pp. 63-89, 405-55. Spooners views were questioned by V. A. Smith, JRAS. 1915. pp. 800-802; Keith: *ibid* 1916 pp. 138-143. Thomas, *ibid* pp. 362-66.

p. 162. **Baktrian Revolt :**

See *Cambridge History of India* Vol. I Chap. XVII with a comprehensive bibliography; Tarn: *Greeks in Bactria and India*. Poussain: *op. cit*; A. K. Narain: *The Indo-Greeks*. The coins of the Indo-Greek rulers are described *in extenso* by Gardner in his *Catalogue of coins in the British Museum* and by Whitehead: *Catalogue of coins in the Punjab Museum*. Vol. I. p. 166. For an account of the Indian embassies to Rome-see Rawlinson: *Intercourse between India and the western world* which has also a good bibliography on the subject.

p. 171. Śiva and Viṣṇu (under the form of Kriṣṇa) were reported by the Greeks as Dionysius and Herakles respectively (See *Cambridge History of India* Vol. I p. 437).

pp. 183 ff. Taprobane: Tabropane or Ceylon was known to the ancient Indians as Tāmraparṇi or Tambapanni (*Tambapanidvīpa*) Ref Rhys Davids: *Buddhist India* p. 105. The town of Tambapanni was founded by prince Vijaya (c. 483-445 B. C. (*Cambridge History of India* Vol. I. 549) based on *Mahāvāriśa* and *Dīpavāriśa*). Cf B. M. Barua: *Ceylon Lectures*.

pp. 204 ff. A comprehensive account of the Indian Fauna is given in the *Sacred Book of the Hindus*. Vol. XV.

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